INDIANA DEPARTMENT OF INSURANCE
October 6, 2003
Bulletin 122
Use of Credit Information by Insurance Companies

This Bulletin is directed to all insurance companies, as defined by IC 27-1-2-3, that write personal lines property and casualty products in this state. IC 27-2-21 as added by Senate Enrolled Act 178 (P.L. 201-2003) addresses the use of credit information by these insurance companies for applications submitted and policies issued, delivered, amended or renewed after December 31, 2003. The definitions contained in IC 27-2-21 apply to this bulletin.

An insurer that uses a credit score to underwrite and rate risks shall file the insurer's scoring models or other scoring processes with the Department of Insurance (Department). This filing is confidential under IC 5-14-3-4(a)(1) and IC 27-2-21-20(d) and not available for public inspection. To afford the Department an opportunity to review these filings for compliance with IC 27-2-21 before use after December 31, 2003, the Department is directing companies to make their filings by November 15, 2003. While an insurer is not required to await Department approval before implementing rates on personal lines property and casualty products, the rating methodology must be consistent with Indiana law including IC 27-1-22, IC 27-2-21 and IC 27-4-1-4. The Department is asking for prior submission of these filings to avoid disruption in the marketplace if the Department determines an insurer's filing is not compliant with applicable laws. Companies should identify their filings as made pursuant to IC 27-2-21 and should separate all confidential documents and clearly identify them as confidential as described in Bulletin 111. Pursuant to IC 27-2-21-20 the scoring model and other scoring processes are confidential.

Insurers that use credit information were required by Bulletin 111 to file their credit scoring methodologies in 2002. If the 2002 filing is compliant with the provisions of IC 27-2-21 then there is no need for the insurer to file in 2003. In these cases, the insurer should notify the Department in writing that they have made no changes to the 2002 filing and certify that is it compliant with the provisions of IC 27-2-21.

An insurer may not deny, cancel or decline to renew a personal insurance policy solely on the basis of credit information. An insurer may not base an insured's renewal rate for a personal insurance policy solely on credit information. The Department interprets this prohibition to mean that an insurer may not deny, cancel, decline to renew or increase a renewal rate due to a credit score unless at least one other rating factor has changed to indicate a denial, cancellation, declination to renew or increase in the premium rate. These actions are considered "adverse actions". Other factors may include, but are not limited to, rating territory, driver class, driving record, age of home, age of the insured, location of home, claim experience, and number of vehicles owned. If no other factor used in underwriting or rating would cause the insurer to deny, cancel, decline to renew or increase a renewal rate and credit information would indicate such an action, the insurer is prohibited from denying, canceling, declining to renew or increasing the premium rate, as this would constitute taking an adverse action solely on the basis of credit information. A base rate change cannot be identified as the second factor to support an adverse action.

If credit is one of the factors leading to an adverse action the insurer must use a credit report issued or a credit score calculated not more than ninety (90) days before the effective date of the policy or the renewal. In addition, the insurer shall provide notice to the consumer in accordance with the Federal Fair Credit Reporting Act and provide notice to the consumer explaining the reason for the adverse action. This notice shall be sufficiently clear and use specific, not general, language to identify the basis for the insurer's adverse action.

An insurer may not use income, gender, address, zip code, ethnic group, religion, marital status or nationality as a factor in determining the credit score. An insurer may not take an adverse action against a consumer solely because the consumer does not have a credit card account. The absence of credit information may not be used in underwriting unless the insurer presents information acceptable to the Commissioner to show the proposed treatment is neutral to the consumer. If an insurer uses credit information the insurer shall recalculate the insurance score or obtain an updated credit report at least every thirty-six (36) months. If an insured requests, the insurer must re-underwrite or re-rate the policy with an updated credit report or score not more often than one time in a twelve (12) month period.

An insurance score cannot consider as a negative factor a credit inquiry that was not initiated by the consumer. A consumer's inquiry to his/her own credit cannot be used as a negative factor. Credit inquiries relating to insurance coverage or unpaid medical bills can not be used as negative factors. Multiple lender inquiries related to a home mortgage or automobile financing in a thirty (30) day period can only be counted as one inquiry.

The application of insurance must inform the consumer that credit information is used by the insurer. The insurer must have a policy in place for handling notification of an error in a credit report and also a procedure for a consumer to dispute a credit score.

The Department will review filings to ensure that insurers using credit information are acting appropriately. An insurer that is found to be acting contrary to the provisions of IC 27-2-21 will be subject to enforcement action under IC 27-4-1.

INDIANA DEPARTMENT OF INSURANCE
Sally McCarty
Commissioner

NATURAL RESOURCES COMMISSION

Information Bulletin #36 (First Amendment)

Subject: Procedural Guidelines for the Interpretations of the Conservancy District Article (IC 14-33). The process outlined here supersedes Information Bulletin #6, Interpretations of Conservancy District Chapter (IC 13-3-3): Contiguous Areas and Annexation (17 IR 1836-1838) and Information Bulletin #12, Procedural Guidelines for the Establishment, Development, and Dissolution of Conservancy Districts (19 IR 2801-2808).

1. History

The development of conservancy districts is an increasingly active option for addressing a variety of land use issues at the local level. Freeholders within contiguous geographic areas may use a conservancy district to achieve a dependable drinking water supply, to provide for sewage collection and treatment, to improve flood control, to reduce soil erosion, or to achieve any of numerous other water-resource community goals, either singly or in combination. IC 14-33-1-1.

The determination whether to approve the establishment of a conservancy district and the primary responsibility for the oversight of an existing conservancy district rest with a circuit court where the district is located. IC 14-33-2-26. Management of the district itself is under the control of a board of directors, selected initially by the county commissioners and subsequently by the freeholders of the district. IC 14-33-5-11.

Important roles are also served by the natural resources commission at six crucial stages in the formation, management, and dissolution of conservancy districts. At two of the stages, hearings for public input are required. At the other four, hearings may be requested. These stages also provide the primary forums for the receipt and evaluation of scientific and technical data upon which the court adjudicates and the board manages. In the receipt and evaluation of technical data, the commission brings together reports and analyses of the department of natural resources, acting primarily through the division of water, and other state and local agencies. Most common among these are the department of environmental management, state department of health, and utility regulatory commission.

In 1996, a comprehensive commission policy was established for procedural functions relating to the formation and development of conservancy districts. [Information Bulletin #12, 19 IR 2801, superseded]. Four developments were identified by the commission in support of the policy:

First, the absence of a policy led to public uncertainty and discomfort, particularly among persons who oppose the formation of a conservancy district or who oppose the development of a project within an existing conservancy district. Concerns had been expressed that the conservancy district process should be re-evaluated to assure all citizens within the boundaries of a proposed or existing district would have meaningful access to the hearing processes.

Second, the complexity of the economic and environmental issues supported the need for a consistent policy. Not the least of these issues were the regulatory functions of the state agencies and their coordination with local governmental entities bearing upon the functions of conservancy districts.

Third, the natural resources commission and the department of natural resources had experienced a statutory evolution regarding hearing processes that had not yet been accommodated for conservancy district hearings. Most noteworthy was the development of the administrative orders and procedures act (IC 4-21.5) and the "sunset review" process for these agencies that resulted in 1990 and 1991 legislation.

The fourth development was the recodification of natural resources laws set forth in P.L. 1-1995. The recodification resolved a statutory ambiguity relative to adding territory to conservancy districts. Compare IC 13-3-3-6(a) as recodified at IC 14-33-4-2(b). In part to address the ambiguity, the commission implemented Information Bulletin #6, published at 17 IR 1836 (April 1, 1994). With the recodification, Information Bulletin #6 was reconsidered and amended.

In response to these developments, Information Bulletin #12 provided guidelines for implementation of conservancy districts processes, where those processes were within the jurisdiction of the natural resources commission. A flexible guidance was designed to help the commission fully and fairly review pertinent issues. Responsibilities were identified and delegated to the commission's division of hearings, and to the department of natural resources, so as to foster better coordination among these and other pertinent agencies.

The primary purposes of Information Bulletin 33 are as follows: (1) refinement of the purposes previously addressed in Information Bulletin #12; (2) integration of the "contiguousness" analysis contained in Information Bulletin #6; (3) clarification of agency treatment of initiatives to add a purpose to an existing district; (4) inclusion of standards for determining whether a district qualifies for the purpose of flood prevention and control; and, (5) consideration of conservancy district elections.

The six crucial stages in which the commission serves are considered separately. These stages are as follows:

(1) consideration of technical issues prior to formation of a district;

(2) development of a district plan;

(3) development of a unit of work;

(4) addition of territory to an existing district;

(5) addition of a purpose to an existing district; and,

(6) dissolution of a district.

The natural resources commission on September 16, 2003 approved amendments to this information bulletin, for additions to conservancy districts in Hendricks County. These amendments were published in the Indiana Register and became effective on November 1, 2003.

2. Consideration of Technical Issues Prior to Formation of a District

A. Petition Referral

As provided in IC 14-33-2-17(b), after a court determines a petition to create a district is in proper form and bears the needed signatures, the petition is referred to the natural resources commission for a technical review. The issues for review are set forth in subsection (c) and include whether:

(1) the proposed district appears to be necessary;

(2) the proposed district holds promise of economic and engineering feasibility;

(3) the proposed district seems to offer benefits in excess of costs and damages (or, for water supply, sewage disposal, or water storage, whether the public health will be served);

(4) the proposed district proposes to cover and serve a proper area; and,

(5) the proposed district could be established in a manner compatible with similar governmental entities.

At least one public hearing is mandatory. An interested person has "the right to be heard. At the request of an interested person, the commission shall hold hearings at the county seat of a county containing land in the proposed district." IC 14-33-2-19(a). Notice of the hearing must be published in a "newspaper of general circulation in each county containing land in the proposed district." IC 14-33-2-19(b). The commission is also required to incorporate technical assistance from any state and local agency that might have jurisdiction over the subject-matter of the proposed district.

The information received at public hearing and from the agencies is incorporated in a factfinding report to the commission from its hearing officer. The factfinding report of the commission on the proposed district is prima facie evidence of the facts in all subsequent proceedings. IC 14-33-2-23. After receipt of the report from the commission, the court sets another hearing at which an opportunity for additional evidence is provided. IC 14-33-2-25.

Of the six stages under consideration, the initial stage has traditionally been the one most likely to evoke controversy. The petitioner is always represented by an attorney. Where there is a formal remonstrance to a proposed district, the remonstrants are likely to have legal representation. Attorneys participating in the process at this stage, most notably those representing remonstrants, have sometimes urged the full application of the administrative orders and procedures act. Key elements of that act are that all testimony must be given under oath, there is an opportunity for the cross-examination of witnesses, and there is a prohibition on substantive ex parte communications between a party and the administrative law judge (or, if applied to conservancy districts, the hearing officer).

The administrative orders and procedures act does not appear to have direct application to the commission's role prior to formation of a district. Most notably, the act applies generally to agency "orders". The commission issues not an order but a factfinding report that the circuit court then utilizes as prima facie evidence. The court itself issues the order whether or not to create a conservancy district and does so only following a judicial hearing held after receipt of the commission's factfinding report. In addition, the application of the relatively formal processes of the administrative orders and procedures act appear unwieldy in relation to the informal public hearings before the commission's hearing officer; often these public hearings are attended by hundreds of participating citizens. Application of the administrative orders and procedures act may have a chilling effect upon public comment and inquiry at this preliminary stage. Finally, before the hearing date the hearing officer typically is only vaguely informed, if informed at all, of the identity of any remonstrants. The concept of party status is not generally well-defined at this stage, casting uncertainty on application of the prohibition against substantive ex parte communications.

On the other hand, fairness requires the full participation by remonstrants and by citizens seeking additional information, as well as by the petitioners, in this stage of the process. The development of a complete factfinding report is also supported by full participation by all citizens, particularly the freeholders to a proposed district. The process should be conducted in a manner which both is and has the appearance of being impartial. To these ends, the following guidelines are established:

(1) Referrals by a court for the technical review anticipated by IC 14-33-2-17(b) are directed to the following address:

Division of Hearings
Natural Resources Commission
Indiana Government Center South
402 West Washington Street, Room W272
Indianapolis, IN 46204-2739

(2) As soon as practicable after the receipt of the referral, the director of the division of hearings appoints a hearing officer. The hearing officer conducts actions appropriate to the preparation and submission to the commission of a recommended factfinding report. Included among these actions are the following:

(A) The hearing officer promptly provides a copy of the referral to the division of water of the department of natural

resources, the department of environmental management, the state department of health, the utility regulatory commission, and any other agency determined by the hearing officer to have jurisdiction over the subject-matter of the referral. Accompanied by the referral is an invitation for comment as well as the address and telephone number of a contact person within the division of water. The address for the contact person is as follows:

Division of Water–Project Development
Department of Natural Resources
Indiana Government Center South
402 West Washington Street, Room W264
Indianapolis, IN 46204-2641

(B) The hearing officer confers with the court or the clerk of the court to determine, if in addition to the petitioners, a remonstrant or other party has entered an appearance as a party to the civil proceeding.

(C) The hearing officer forwards a copy of this nonrule policy document to each of the parties. Also included are the name, address, and telephone number of the contact person within the division of water who will coordinate technical reviews.

(D) If parties other than the petitioners have entered an appearance, the hearing officer promptly sets an informal conference of the parties. An invitation to participate is also made to division of water. During the informal conference, the hearing officer will attempt to develop a consensus for the conduct of the public hearing. If a consensus cannot be developed, the hearing officer determines the conduct of the hearing in accordance with the following principles:

1. A hearing is held in the county seat of a county containing land in the proposed district.

2. The process is conducted in the most informal manner practicable that also supports fairness and meaningful public participation.

3. If issues in dispute are identified during the informal conference which require expert testimony, or for which the hearing officer otherwise determines testimony should be under oath, a second hearing may be conducted. An opportunity for cross-examination shall be provided, the hearing recorded by a court stenographer or reporter approved by the commission, and the trial rules of discovery applied. The hearing officer provides written notice to the parties of any second hearing and also announces the time, date, and location of the second hearing during the initial public hearing. Unless otherwise agreed by the parties, the hearing officer makes every reasonable effort to conduct the second hearing so that a delay is not required in the submission of a recommended factfinding report to the commission.

(E) The hearing officer drafts and tenders to the commission a recommended factfinding report. A copy of the report is forwarded to each party, to the division of water, to any agency that commented upon the proposed conservancy district, and to any other person requesting a copy. The hearing officer encloses with the report a notice of the time, date, and location when the commission is scheduled to act upon the recommended factfinding report.

(F) Following action by the commission, the hearing officer causes a copy of the factfinding report of the commission to be filed with the court and served upon the division of water, the parties, and any other person requesting a copy.

B. 'Contiguousness' of District Boundaries

As part of the factfinding report, the commission is required to determine and communicate to the court whether a proposed district would "cover and serve a proper area." IC 14-33-2-17(c)(5). Also, as provided in IC 14-33-2-22, the factfinding report must include "findings on the territorial limits of the proposed district."

Factors or determining appropriate district boundaries are set forth in IC 14-33-3-1. Among these factors is a requirement that "each part of the district is contiguous to another part." The statutory requirement of contiguousness forms an important element to the geographic requirements of the conservancy district chapter.

If lengthy but narrow boundaries are created to incorporate outlying areas into a district, problems could be posed to adjacent areas, particularly if residents of these areas are not allowed to enter the district. The establishment of a district with exclusive boundaries may hinder attempts by the residents to form a new district. These problems may be acute where a purpose of the district is to provide water supply or sewage disposal.

To establish a consistent and viable framework for determining what is "contiguous" within IC 14-33-3-1, the commission will apply the following:

As used in IC 14-33-3-1, "contiguous" will ordinarily be applied to require that each part of the district adjoin every other part. The requirement is not met where a district boundary is excessively long and narrow. What is excessively long and narrow will be evaluated on an individual basis and will more likely be a major concern for districts that would provide sewage disposal or water supply than for districts which would provide other services. Where the district would provide flood prevention and control, contiguousness will be applied to encourage a coordinated effort within a particular watershed.

An easement or other written license granted by the fee title holder to the district or proposed district may establish contiguousness. Where the district is to provide sewage treatment or water supply, freeholders must typically be provided an

opportunity to connect to an adjacent line or to enter the district. As used in this paragraph, an "adjacent line" is one that is either (1) used to carry sewage and located within 300 feet of the freeholder's building; or (2) used to carry water supply and located on an easement or license that adjoins the freeholder's property. A petitioner must provide the division of water a copy of an easement or other written license that is used to establish contiguousness.

C. Review Standards for Purpose of Flood Prevention and Control

One purpose for which a conservancy district can be established is flood prevention and control. IC 14-33-1-1(a)(1). In order to receive a favorable determination by the commission under IC 14-33-2-17 for the purpose of flood prevention and control, the petitioners must show the district would accomplish at least one of the following functions:

(1) The removal of obstructions and accumulated debris from a waterway channel.

(2) The cleaning or straightening of a channel.

(3) The development of a new and enlarged channel.

(4) The construction or repair of dikes, levees, or other flood protective works.

(5) The construction of waterway bank protection.

(6) The establishment of a floodway.

All works for the purpose of flood prevention and control must be coordinated in design, construction, and operation according to sound and accepted engineering practice so as to effect the best flood control obtainable that complies with IC 14-28-1-29.

3. Development of a District Plan

Following the creation of a conservancy district by the circuit court, the district is required to establish a "district plan." As provided in IC 14-33-6-2, a "district plan consists of an engineering report that sets forth the general, comprehensive plan for the accomplishment of each purpose for which the district was established." The district plan includes physical and technical descriptions, maps, preliminary drawings, cost estimates based upon preliminary engineering surveys and studies, copies of agreements with other governmental entities, and works of improvement.

The board of directors is required to submit a district plan to the commission for its approval within 120 days after the appointment of the board members, unless a time extension is obtained from the commission. IC 14-13-6-3. "The commission may reject a plan or any part of a plan." IC 14-13-6-4(d). "After receiving the approval of the commission, the board shall file the district plan with the court." IC 14-13-6-5(a). Following the filing by the board of directors, the court sets the district plan for a hearing. IC 14-13-6-5(b).

The conservancy district statutory article does not address review of the "approval" process at the state agency level, but administrative reviews are addressed generally in IC 4-21.5 ("administrative orders and procedures act" or "AOPA"). Licenses are governed by AOPA, and included within the definition of "license" is any "approval" required by law. IC 4-21.5-1-8. The term "license" is also defined in the statutory chapter governing the relationship of the natural resources commission and the department of natural resources to include an "approval" that may be issued by the department under Indiana law. IC 14-11-3-1(a).

Significant to the inclusion of "approval" within the definition of license contained in IC 14-11-3-1(a) is that "[n]otwithstanding any other law, the director shall issue all licenses." IC 14-11-3-1(b). A designee may act for the director in license issuance, but the designee must be a "full-time employee of the department" of natural resources. IC 14-11-3-1(c). The commission then acts as the "ultimate authority" for license determinations by the director or his designee. IC 14-10-2-3. "Ultimate authority" is defined in AOPA to mean the entity "in whom the final authority for an agency is vested by law." IC 4-21.5-1-15.

With this background, the following guidelines are established:

(1) The board of directors of a district submits any proposal for or pertaining to a district plan to the department's division of water.

(2) The division of water assists the board in identifying licenses likely to be required to implement the district plan. The division of water also coordinates with the department of environmental management and the state department of health concerning any comments pertaining to the development of a district plan.

(3) The division of water reviews and evaluates comments and alternative proposals to the district plan that may be submitted by other interested persons. The division of water shall consider only technical, engineering, and scientific issues necessary to the development of the district plan. The division may use facilitation or mediation to help resolve any conflict.

(4) The director of the division of water approves or disapproves the district plan. Notice of the agency action and the opportunity to seek administrative review under AOPA is provided to the board of directors and to any other person requesting a copy of the notice. The director of the division of water also acts upon any request to extend the time to file a district plan, and the same notification process applies. The division director shall encourage the board to file completed applications for any necessary license as soon as practicable after approval of a district plan.

(5) The commission's division of hearings conducts any administrative review sought under part (4). The commission is the ultimate authority for the department of natural resources under AOPA. Following the completion of administrative review, the division of hearings notifies the parties of the completion and that review of the commission order is subject to further action by the circuit court pursuant to IC 14-13-6-5(b).

4. Development of a Unit of Work

To implement a district plan, the board of directors of a conservancy district "shall order the preparation of the detailed construction drawings, specifications, and refined cost estimates.... The implementation may involve all or part of the works of improvement if the part constitutes a unit that:

(1) can be constructed and operated as a feasible unit alone; and

(2) can be operated economically in conjunction with other proposed works set forth in the district plan." IC 14-33-6-8(a). "When the drawings, specifications, and cost estimates have been prepared to the satisfaction of the board [of directors], the board shall by resolution tentatively adopt and submit the drawings, specifications, and cost estimates to the commission for approval." IC 14-33-6-8(b). "Upon the receipt of the written approval," the board provides a "hearing on the drawings, specifications, and cost estimates at which any interested person must be heard." IC 14-33-6-9.

The process of the development of a unit of work is similar to that for the preparation of a district plan. An important distinction is no judicial hearing follows the commission approval. Within the context of the review process, the legislature may have envisioned the hearing by the board, following commission approval of the unit of work, serves as an informational rather than judicial or quasi-judicial process.

With this background, the following guidelines are established:

(1) The board of directors of a district submits to the division of water of the department of natural resources any proposals for or pertaining to a unit work.

(2) The division of water assists the board in identifying licenses likely to be required to implement the district plan. The division of water also coordinates with the department of environmental management and the state department of health concerning any comments pertaining to the development of a unit of work.

(3) The division of water reviews and gives due consideration to comments and alternative proposals to the unit of work which may be submitted by other interested persons. In performing this function, the division is limited to consideration of the design and construction of structures needed to implement the district plan. The division may use facilitation or mediation to help resolve any conflict.

(4) The director of the division of water approves or disapproves the unit of work. Notice of the agency action and the opportunity to seek administrative review pursuant to the administrative orders and procedures act is provided to the board of directors and to any other person requesting a copy of the notice. The director of the division of water also acts upon any request to extend the time by which to file a unit of work, and the same notification process applies. The division director shall encourage the board of a conservancy district to file completed applications for any necessary license as soon as practicable after approval of a unit of work.

(5) The commission's division of hearings conducts any administrative review sought under part (4). The commission is the ultimate authority for the department of natural resources. Following the completion of administrative review under AOPA, the division of hearings notifies the parties of the final agency action by the commission and outlines the process for obtaining judicial review. Also included in the notice is reference to the informal hearing before the board of directors pursuant to IC 14-33-6-9.

5. Addition of Territory to an Existing District

Ordinarily, territory may be added to an existing district according to either of two procedures. Additional considerations apply to the addition of territory to a conservancy district located in Hendricks County. The procedures in these three circumstances follow distinct paths and are here viewed separately:

A. Additions Initiated with the Circuit Court

Pursuant to IC 14-33-4-2(b)(1), territory may be added according to the same procedure as is provided for the establishment of a district. A petition to add territory under this subdivision will be supported by the following guidance.

After a court determines a petition to add territory to a district is in proper form and bears the needed signatures, the petition is referred to the natural resources commission for a technical review. The issues for review include whether:

1. the proposed addition appears to be necessary;
2. the proposed addition holds promise of economic and engineering feasibility;
3. the proposed addition seems to offer benefits in excess of costs and damages (or, for water supply, sewage disposal, or water storage, whether the public health will be served);
4. the proposed addition proposes to cover and serve a proper area; and,
5. the proposed addition could be implemented in a manner compatible with similar governmental entities, most notably the existing conservancy district.

At least one public hearing is mandatory. The hearing officer will be selected and conduct the hearing essentially as provided to consider the establishment of a new district. An interested person has the right to be heard. The hearing will be held at the county seat of a county containing land in the proposed district. Notice of the hearing will be published in a newspaper of general circulation in each county containing land in the district and the proposed addition. The commission hearing officer will incorporate technical

assistance from a state agency having jurisdiction over the subject-matter of the district and the proposed addition.

Where territory is sought to be added to an existing district, the impact upon the district is often inconsequential. An addition may be relatively minor and involve only a small area with little or no measurable affect to the freeholders within the existing district. The hearing officer will consider and, following the completion of the public hearing or hearings, report to the director of the division of water as to the likely consequence to the district of the proposed addition. The director of the division of water is delegated authority to determine when the proposed addition of territory is de minimis and when its review by the commission is unlikely to be productive. When the division director makes such a determination, the hearing officer's report is forwarded directly to the court as the commission's factfinding report. This report is to be submitted within 30 days of receipt by the division of water of a completed petition to add territory to a district.

B. Additions Initiated with the Board of Directors

As provided in IC 14-33-4-2(b)(2), an addition of territory to an existing district may also be initiated by a board resolution. The resolution follows a petition by the majority of freeholders or the municipality in the area proposed to be added. The resolution and petition are filed with the court, and the court sets the matter for hearing. Notice of the hearing is sent to the natural resources commission and to the freeholders in the district and in the area proposed to be served by the additional territory. The notice to the commission should be forwarded to the division of hearings.

Upon receipt of the notice, the division of hearings will notify the division of water of the department of natural resources and other state agencies which appear to have jurisdiction over the subject of the addition. A conservancy district board wishing to apply IC 14-33-4-2(b)(2) is urged to communicate its wish to the division of hearings as soon as practicable so that expeditious technical discussions may be pursued with the appropriate state agencies. The recommendation is that this communication occur at least 60 days prior to the setting of a hearing under IC 14-33-4-2(d). Adequate review is essential to a favorable comment by the commission to the court. The division director of the division of water is delegated authority by the commission to report favorably, to make recommendations to modify or condition the addition of territory, or to object to the addition of territory. See particularly IC 14-33-4-2(e).

C. Additions to a Conservancy District in Hendricks County

As provided in IC 14-33-4-3, an addition of territory to an existing district in Hendricks County is initiated when the freeholders who desire the expansion file a petition with the board and mail notice of the petition to each freeholder who has not signed the petition and who owns land in the proposed area to be added. If the board approves the petition, the board files the board's resolution and the petition with the court and with the commission's division of hearings. The resolution may contain reasonable terms and conditions imposed on the additional area.

Within 30 days after receiving the petition, each of the following shall occur:

(a) The director of the division of hearings shall appoint a hearing officer to conduct a hearing to determine whether the addition will have a de minimis effect. Addition of the area will have a de minimis effect under this subsection if the addition:

(1) is relatively minor in area; and

(2) will have little or no measurable impact on:

(A) the freeholders within the existing district; or

(B) any other conservancy district, any flood control project, any reservoir, any lake, any drain, any levee, and any other water management or water supply project.

The hearing officer shall give notice of the hearing by publication at least one (1) time in one (1) newspaper of general circulation in Hendricks County. The petitioner has the burden of going forward and the burden of persuasion at hearing to demonstrate through probative evidence that the effect is likely to be no more than de minimis. The evidence must contain facts sufficient to support the legal conclusions required by this subsection.

(b) The hearing officer shall prepare a summary of evidence received during the public hearing and report to the director of the division of water with recommendations as to whether the addition is likely to have more than a de minimus effect.

(c) The director of the division of water shall make a determination whether the addition of area is likely to have more than a de minimis effect and report upon that determination to the court and the board. If the division director determines the effect is likely to be no more than de minimis, the report is the commission's final factfinding report on the proposed addition. If the division director determines the effect may be more than de minimis, subsection (d) applies.

(d) If the director of the division of water determines the effect of the addition of area may have more than a de minimis effect, the director of the division of hearings shall appoint a hearing officer to conduct all proceedings anticipated by IC 14-33-4-3(e). The director of the division of hearings may appoint the same person as was appointed under subsection (a). Following the completion of these proceedings, the hearing officer shall make recommendations to the commission concerning each of these items:

(1) A determination under IC 14-33-2-17 with respect to the proposed addition to the district. In addition to determining compatibility with the districts described in IC 14-33-2-17(c)(6), the hearing officer shall also determine whether the addition could be established and operated in a manner compatible with the following:

(A) the existing conservancy district;

(B) regional water districts; and

(C) regional sewer districts.

(2) A report under IC 14-33-2-22 with respect to the proposed addition to the district.

The commission shall make its report to the Hendricks Circuit Court within one hundred twenty (120) days after the petition for the addition of territory is referred to the commission. The remaining procedures in IC 14-33-2-23 through IC 14-33-2-30, and in this information bulletin, for the establishment of a district shall be followed.

6. Addition of a Purpose to an Existing District

A purpose may be added to an existing district in either of two ways. The same procedure may be used as is provided for the establishment of a district. IC 14-33-1-4(1). If this subdivision is applied, reference should be made to the process for the addition of territory pursuant to part 5A of this nonrule policy document.

In the alternative, IC 14-33-1-4(2) provides that the conservancy district board may add a purpose based upon a petition signed by at least 10% of the freeholders of the district. If the resolution is passed, the resolution and petition are filed with the county court and the court sets the matter for hearing. The court forwards to the commission the notice of hearing along with a copy of the resolution "at least 30 days before the date of hearing." IC 14-33-1-5.

Upon receipt of the notice, the division of hearings will notify the department's division of water and other state agencies that appear to have jurisdiction over the subject of the addition. A conservancy district board wishing to apply IC 14-33-1-4(2) is urged to communicate its wish to the division of hearings as soon as practicable so that expeditious technical discussions may be pursued with the appropriate state agencies. The recommendation is this communication occur at least 60 days before setting a hearing under IC 14-33-1-5(b). Adequate review is essential to a favorable comment by the commission to the court. The division director of the division of water is delegated authority by the commission to report favorably, to make recommendations to modify or condition the addition of territory, or to object to the addition of territory. See particularly IC 14-33-1-5(e).

7. Dissolution of a District

A conservancy district may be dissolved either because the district is "no longer of benefit" (IC 14-33-15) or because "construction of works of improvement has not begun within six (6) years after the district plan." (IC 14-33-16). Where works of improvement are not begun, there is no statutory participation by the natural resources commission; no procedural issue is presented. A district dissolved due to loss of benefit applies "the same procedure used to establish a district. The petition must set forth the change of circumstances that causes the district to lose the district's benefit." IC 14-13-15-1.

Because the process is essentially the same for the dissolution as for the establishment of a conservancy district, the same analysis applies to the development of an appropriate process. With this background, the following guidelines are established:

(1) Referrals by a court for the technical review anticipated by IC 14-33-15-1 are directed to the division of hearings.

(2) As soon as practicable after the receipt of the referral, the director of the division of hearings appoints a hearing officer. The hearing officer conducts actions appropriate to the preparation and submission to the commission of a recommended factfinding report. Included among these actions are the following:

(A) The hearing officer promptly provides a copy of the referral to the division of water of the department of natural resources, the department of environmental management, the state department of health, the utility regulatory commission, and any other agency determined by the hearing officer to have jurisdiction over the subject-matter of the referral. Accompanied by the referral is an invitation for comment as well as the address and telephone number of a contact person within the division of water.

(B) The hearing officer confers with the court or the clerk of the court to determine, if in addition to the petitioners, a remonstrant or other party has entered an appearance as a party to the civil proceeding.

(C) The hearing officer forwards a copy of this nonrule policy document to each of the parties. Also included are the name, address, and telephone number of the contact person within the division of water.

(D) If parties other than the petitioners have entered an appearance, the hearing officer promptly sets an informal conference of the parties. An invitation to participate is also made to division of water.

During the informal conference, the hearing officer will attempt to develop a consensus for the conduct of the public hearing. If a consensus cannot be developed, the hearing officer determines the conduct of the hearing in accordance with the following principles:

(1) A hearing is held the county seat of a county containing land in the district.

(2) The process is conducted in the most informal manner practicable which also support fairness and meaningful public participation.

(3) If issues in dispute are identified requiring expert testimony, or for which the hearing officer otherwise determines testimony should be under oath, a second hearing may be conducted. An opportunity for cross-examination shall be provided, the hearing recorded by a court stenographer or reporter approved by the commission, and the trial rules of discovery applied. The hearing officer announces the time, date, and location of the second hearing during the initial public hearing. Unless otherwise agreed by the parties, the hearing officer

makes every reasonable effort to conduct the second hearing so that a delay is not required in the submission of a recommended factfinding report to the commission.

(4) The hearing officer determines whether either of the following matters are in issue: (a) whether the board has failed, within two years of establishment of the conservancy district, to produce satisfactory evidence of progress in the preparation of the district plan; or, (b) whether federal or state money, or both, contemplated in the petition for the establishment of the district, appears to be unavailable. See IC 14-33-15-2.

(E) The hearing officer drafts and tenders to the commission a recommended factfinding report. A copy of the report is forwarded to each party, to the division of water, to any agency that commented upon the conservancy district, and to any other person requesting a copy. The hearing officer encloses with the report a notice of the time, date, and location when the commission is scheduled to act upon the recommended factfinding report.

(F) Following action by the commission, the hearing officer causes a copy of the factfinding report of the commission to be served upon the division of water, the parties, and any other person requesting a copy.

8. Election of Board of Directors and Notice to Commission

Neither the natural resources commission nor the department of natural resources have jurisdiction over board elections. The board of commissioners of the county appoints the board of directors for the new district within twenty (20) days after a court order establishing a district. IC 14-33-5-1. A person adversely affected by an action committed or omitted by the board may petition the court having jurisdiction over the district to enjoin or mandate the board. IC. 14-33-5-24.

The board chair is required by IC 14-33-5-17 to promptly notify the commission when board members are elected or appointed. The department's division of water maintains a database of conservancy districts and board members. By this Information Bulletin, the commission identifies the following address for the notice required by IC 14-33-5-17:

Division of Water–Project Development
Department of Natural Resources
Indiana Government Center South
402 West Washington Street, Room W264
Indianapolis, IN 46204-2641

Service at this address will also help assure the division of water's database is current. For more information see http://www.IN.gov/dnr/water/pdf/con_dist_dir_2001.pdf.

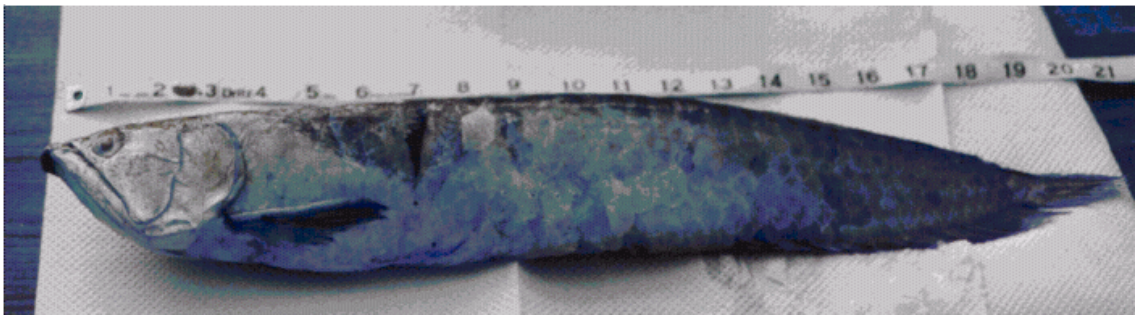
9. Application and Modification

This information bulletin is intended to be liberally construed in order to support efficient administration by the natural resources commission, acting in cooperation with other agencies, of its conservancy district responsibilities. Modifications to the document may be needed based upon experience or legislative changes. Suggestions for modification of the document are welcomed from the public and should be forwarded to the division of hearings at the address set forth previously. Send any suggestions to the address for the division of hearings shown above or by email to slucas@dnr.state.in.us.

Natural Resources Commission
Indiana Aquatic Nuisance Species (ANS)
Management Plan
(Information Bulletin #39)

Purpose: The purpose of this nonrule policy document is to provide a comprehensive guidance for addressing the challenges posed by aquatic nuisance species to Indiana and its citizens. The document defines the need for providing adequate human and financial resources. The great adverse economic and environmental impact of aquatic nuisance species is described. The document emphasizes the role of education but also contemplates the need for regulatory controls. The document presents a visionary plan that is usable by governmental and nongovernmental organizations. The allocation of resources is prioritized upon, and must in the future continue to be prioritized upon, the best available science-based risk assessment and management strategies.

Effective Date: The Natural Resources Commission approved the principles contained in this nonrule policy document during a regular meeting held on September 16, 2003. The document is effective upon approval by the Governor and publication in the Indiana Register.



Aruana caught by angler in Lake George, Lake County, Indiana Photo credit: Brian Breidert, IDNR

Indiana Department of Natural Resources

Funded by: Division of Fish and Wildlife

Edited by: Phil Seng and Gwen White, D.J. Case & Associates, Mishawaka, Indiana

October 1, 2003

Indiana Aquatic Nuisance Species (ANS) Management Plan

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Indiana Aquatic Nuisance Species (ANS)
Management Plan

EXECUTIVE SUMMARY
What are aquatic nuisance species?

An "invasive species" is defined as a species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112; http://www.invasivespecies.gov). Invasive species can be plants, animals, and other organisms, such as bacteria and viruses. This plan addresses invasive species that can live in the aquatic habitats of Indiana, such as lakes, rivers, and wetlands.

Why should we be concerned?

Invasive species problems are both a consequence of and an impact on the economic welfare of our nation (Evans, 2003). Most introductions of invasive species can be linked to the intended or unintended consequences of economic activities, such as trade and shipping (Perrings, et al., 2002). Six types of economic impacts can be identified: (a) production; (b) price and market effects; (c) trade; (d) food security and nutrition; (e) human health and the environment; and (f) financial costs impacts (Food and Agricultural Organization, 2001). Over the past 200 years or so, more than 50,000 foreign plant and animal species have become established in the United States. About one in seven has become invasive, with damage and control costs estimated at more than $137 billion each year (Pimental et al., 2000).

New invasions of nuisance aquatic species could decimate fisheries and other aquatic resources, requiring funds for prevention, control, and mitigation that could have been used for other purposes. Nuisance aquatic plant and animal invaders, such as zebra mussels, bighead carp, purple loosestrife, gizzard shad, and sea lamprey, cost Hoosiers millions of dollars each year in control measures and lost natural resource value. For instance, University of Notre Dame researchers determined that it would be cost effective to spend $324,000 per year to prevent zebra mussel infestation of each lake associated with a power plant due to the high costs of managing their negative impacts on water withdrawals (Leung et al., 2002). The Department of Natural Resources estimated that lake residents in northern Indiana spend at least $800,000 per year to remove Eurasian watermilfoil, an invasive aquatic plant that mats across the water surface, degrades habitat for fish and wildlife, and interferes with recreational uses (White, 1998). An initial estimate created during the process of developing this document indicates that state agencies and others are spending at least $3 million annually on prevention and control of invasive species in Indiana and much more could be done.

What can we do to minimize our risks?

The development of a state management plan, as called for in Section 1204 of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L. 101-646) (NANPCA) provides an opportunity for federal cost-share support for implementation of the plan. The Indiana Aquatic Nuisance Species (ANS) Management Plan identifies feasible, cost-effective management practices and measures to be taken on by state and local programs to prevent and control ANS infestations in a manner that is environmentally sound.

Universities, industries, non-governmental organizations, and citizens interested in aquatic nuisance species control have contributed ideas toward development of a statewide long-term Indiana ANS Management Plan. The completed plan will be used as a road map for guiding nuisance control efforts over the next five years. Approval of the management plan by the national ANS Task Force is also required for a state to be eligible for federal cost-share support. In recent years, adjacent Midwestern states have received up to $100,000 annually in federal funds for implementation of ANS plans. The plan will also provide a foundation for prioritizing and coordinating actions in other state and federal programs. For instance, the Indiana state legislature approved an increase in the Lake and River Enhancement (LARE) boater fee to generate about $1.1 million annually, starting in 2004, for sediment removal and control of exotic plants and animals in Indiana waters.

The goals of this state management plan are designed to address different stages of ANS invasion:

1. preventing the introduction of new nonindigenous species transported from water bodies in other parts of the continent or world;
2. limiting the spread of established, reproducing ANS populations to other water bodies in Indiana and other states; and
3. mitigating the harmful ecological, economic, social, and public health impacts of established ANS populations.

The draft Indiana ANS Plan includes an introduction to aquatic exotic species issues, regulations, and a strategic implementation section with goals, actions, tasks, and subtasks. The Implementation Table contains a list of strategies and actions to carry out these goals. Over 170 strategies and actions are listed under each of 32 objectives. The regulatory sections were developed in close coordination with Dr. Robert Waltz, who is leading a DNR effort to review and propose modifications for state authority over all types of invasive species, both aquatic and terrestrial.

Public input and approval process

Information for plan development was derived from a number of agency meetings, interviews with over 40 stakeholders, and public meetings on April 15, July 29, and September 18, 2003. The list of project reviewers, including work group members, totaled over 120 individuals who represent industries, agencies, and organizations with an interest in impacts and management of aquatic nuisance species. Drafts of the management plan were available for public review and comment over the summer. All meetings were announced in IDNR Division of Fish and Wildlife *Wild Bulletin* email news service and on the DNR website. A professional facilitation team from D.J. Case & Associates, Mishawaka, Indiana, guided all meetings and plan development under contract to the IDNR Division of Fish and Wildlife.

The agency approval process included presentation of the project to the DNR Advisory Council on August 27, 2003. The Natural Resources Commission approved the plan as a nonrule policy document on September 16, 2003. Gov. Joseph E. Kernan endorsed the plan on October 7, 2003. The plan was published in the Indiana Register on November 1. State eligibility for federal funding is contingent upon final approval by the National ANS Task Force. The Indiana ANS Management Plan and minutes from the public meetings are on the DNR website at: www.invasivespecies.in.gov.

For more information, contact:

Bill James, Chief of Fisheries, 402 W. Washington St., Rm W273, Indianapolis, IN 46204; 317-232-4092; bjames@dnr.state.in.us; or

Phil Seng or Gwen White, Ph.D., D.J. Case & Associates, 607 Lincolnway West, Mishawaka, IN 46544; 574-258-0100; info@djcase.com.

INTRODUCTION

Why should we be concerned?

The introduction of nonindigenous aquatic nuisance species into the Great Lakes, Mississippi River, and inland state waters is a source of biological pollution that threatens not only the ecology of the region and states' water resources, but also the economic, societal and public health conditions of the region and states. The Great Lakes and connecting channels and rivers form the largest surface freshwater system in the world. The aquatic resources of the Great Lakes region are an integral part of activities such as recreation and tourism valued at $15 billion annually with $6.89 billion related to the fishing industry. Approximately 75,000 jobs are supported by sport fisheries; and commercial fisheries provide an additional 9,000 jobs (U.S. Fish and Wildlife Service, 1995). Introduction of over 150 exotic species has irreversibly altered the Great Lakes ecosystem, causing dramatic changes in biological relationships and natural resource availability. Nationally, about 42% (400 of 958) of species that are listed as threatened or endangered under the Endangered Species Act are considered to be at risk primarily because of predation by or competition with non-indigenous species (Nature Conservancy, 1996; Wilcove et al., 1998).

Hoosiers support recreational, commercial, and protective uses of aquatic habitats in Indiana, which range widely from the Lake Michigan shoreline to the banks of the Ohio River. Records of the Indiana Department of Natural Resources show that over 874,000 recreational anglers, 19,000 waterfowl hunters, and 9,000 trappers depend on intact aquatic wildlife and ecosystems in Indiana. An additional 1.7 million wildlife watchers enjoy the benefits of wildlife diversity in the seven major natural regions covering the state. Over 60 rare and endangered species rely on wetland and shallow aquatic habitats in the state. According to the 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, anglers, hunters and wildlife watchers spend $1.5 billion annually to participate in these activities in Indiana. The Indiana Chapter of The Nature Conservancy (2003) indicates that up to 72,000 Hoosiers purchase the environmental license plate over the past nine years, generating over $1.8 million per year for acquisition of parks, recreational areas, nature preserves, and similar open space uses. Ad additional 31,000 state residents contributed almost $400,000 to the funds available for protection of nongame and endangered wildlife. Over 16,000 citizens are members of land conservation trusts, raising over $3.5 million in 2001 for land preservation efforts.

These valuable resources and associated Hoosier investments are at risk if nuisance exotic species invade and degrade these

ecosystems. An initial estimate created during the process of developing this document indicates that state agencies and others are spending at least $3 million annually on prevention and control of invasive species in Indiana and significantly more could be done.

Why are we hearing about more nuisance exotics?

Increasing global trade, airline travel, and internet sales have brought hundreds of exotic species literally to our doorsteps in a period of hours or days. As use of the Great Lakes intensified as a transportation route for commerce, the rate of introduction of aquatic nuisance species also increased. More than one-third of the new organisms have been introduced in the past 30 years, a surge coinciding with the opening of the St. Lawrence Seaway. Other human activities contributing to the transport and dispersal of aquatic nuisance species into the Great Lakes and inland state waters include release of organisms from the ballast water of ships, transport and release from the bottom of ships, movement or intentional release of aquaculture and fishery species along with their associated (free-living and parasitic) organisms, release of organisms associated with pet industries or pest management practices, recreational boating, bait handling, water transport, and ornamental and landscape practices.

Are all exotic species causing problems?

No. Since recorded time began, humans have traveled across the earth, bringing plants and animals with them for food and other uses. Introduced species of plants and animals, such as varieties of corn, wheat, rice, and other food crops, and cattle, poultry, and other livestock, now provide more than 98% of the U.S. food system at a value of approximately $800 billion per year (Pimental, 2002). Modern society reaps the benefits of many cultivated species that were not originally found in Indiana. Some species that were originally introduced with beneficial intent have in the end caused more problems than they were worth. For instance, common carp were transported across the country on railcars in the late 1800s and stocked by the government in waterbodies in nearly every state and several other countries in the Western hemisphere as a source of angling enjoyment and food. More recently, it has become clear that carp can interfere with native fish populations by rooting around in polluted sediments, tearing out beneficial aquatic plants, disturbing nests of native fish, and muddying the water. Despite these negative characteristics, there remain anglers who appreciate the recreation and food provided by this species.

Why do some of these species become nuisances?

Species that are useful to humans are those that can tolerate a broad range of conditions, reproduce easily, can accommodate disturbance associated with human activities, and are resistant to diseases. Unfortunately these characteristics can also mean a new introduction may quickly dominate the native plants and animals in an area that may be more specialized or sensitive to environmental degradation.

Additionally, both humans and domesticated plants and animals can unintentionally carry pests and pathogens. In recent years, scientists have become increasingly concerned with zoonotic diseases that are transmitted from animals to humans. Monkey pox, ebola virus, and HIV are thought to have originated in animals and either mutated or jumped to human populations. While diseases are most commonly spread between closely related species, there are a number of serious pests and pathogens of humans and domestic animals that live in water or have waterborne vectors, such as mosquitoes or fish.

A newly introduced species, if it becomes established through reproduction, can disrupt the natural ecosystem balance by altering the composition, density and interactions of native species. This disruption can cause significant changes to the ecosystem, such as alterations to the foodwebs, nutrient dynamics and biodiversity. New introductions also can cause costly socio-economic impacts even if effective prevention and control mechanisms are established. Eventually, each newly introduced species will become integrated into an ecosystem that is in a constant state of flux; or the population will not survive and become extinct (New York State Department of Environmental Conservation, 1993). The following examples portray the extensive ecological and economic impacts caused by aquatic nuisance species that have been introduced into the Great Lakes and Ohio River basins.

What principles should guide invasive species management in Indiana?

The guiding principles describe the precepts by which the *Indiana ANS Management Plan* has been developed and will be implemented. The *Indiana ANS Management Plan* process will:

- P Ensure strong leadership, resources, staff support, and commitment to follow, implement, and evaluate the plan as an integrated and coordinated long-term process.
- P Show the economic impact of ANS to the people of Indiana by producing effective educational outreach materials and programs.

- Create a visionary plan with elements that can be readily implemented within the short-term and that have adequate money and support.
- Create a usable plan for all levels of government and grassroots organizations.
- Prioritize issues that need to be immediately addressed. Allow for flexibility, recognizing that priorities will vary across agencies and organizations and that all ideas should be retained. Use public input to assure that prioritization recognizes differing viewpoints.
- Use frequent and effective communication tools.
- Use education efforts to develop leadership support from the local to state level.
- Involve the public in education and implementation. Create a plan that is clear, uncluttered, accessible, and avoids unnecessary complexity in messages to the general public as an introduction to ANS issues.
- Assign resources where they will be most effective. Make sure the plan is not driven by politics but by the best available science-based risk assessment and management strategies.

Which species are top priorities for management in Indiana?

The Great Lakes region has been subject to the invasion of aquatic nuisance species since the settlement of the region by Europeans. Since the 1800s, at least 139 nonindigenous aquatic organisms have colonized habitats of the Great Lakes ecosystem (Mills et al., 1993). The bulk of these species include aquatic or wetland plants (42%), fishes (18%), and algae (17%). Introduced species of mollusks, oligochaetes, crustaceans, flatworms, bryozoans, cnidarians, and disease pathogens combined represent 22% of the total. All entered the Great Lakes basin by major mechanisms or routes including shipping (41 exotic species); unintentional releases (40 new species); ship or barge canals, along railroads or highways, or deliberate releases (17 species); unknown entry vectors (14 species); and multiple entry mechanisms (27 species). About 55 percent of these species are native to Eurasia; 13 percent are native to the Atlantic Coast. Approximately 10 percent of the Great Lakes' nonindigenous aquatic species have resulted in significant negative ecological and economic impacts. The NOAA online Great Lakes Aquatic Nondigenous Species List currently provides 162 species known from these ecosystems. Although the obvious impacts of some of the most abundant species are being determined, most of the aquatic nuisance species and their direct and indirect impacts are not known.

No comprehensive survey of invasive species has been conducted for the state of Indiana. However, a number of researchers, district biologists, and aquatic plant management companies have contributed to lists provided in the appendices of this document. Ecological information on several of the species is given in the following sections by taxon (i.e., fish, insects and crustaceans, mussels and snails, and plants). A compilation on information on aquarium species found over the past few years in state waters is also provided. A list of high priority ANS species for Indiana are provided in Table 1. Several of the fish species on the Indiana watch list are from a set of 56 fish species predicted as being potential invaders that could be transported in the ballast water of ships from the Ponto-Caspian region of Eurasia (Kolar and Lodge, 2002). A similar analysis has not been conducted for other groups of plants or animals.

Table 1. Aquatic nuisance species on the watch list (not yet detected in Indiana waters) and ANS species detected in parts of the state but not distributed statewide. The common and scientific names are given, along with the primary paths of introduction. For watch list species, the standard abbreviation for the nearest state, province or region known to have the species is provided. (ONT = Lake Ontario; EA = Eurasia).

Watch list (not yet detected in Indiana waters)

Common name(s)	Scientific name or taxon	Pathway(s) and nearest infestation
Black carp	*Mylopharyngodon piceus*	aquaculture (IL, AR)
Black sea silverside	*Atherina boyeri*	ballast water (EA)
Eurasian minnow	*Phoxinus phoxinus*	ballast water (EA)
European perch	*Perca fluviatilis*	ballast water, aquaculture (EA)
Eurasian ruffe	*Gymnocephalus cernuus*	ballast, fish transfer (MI, WI)
European frogbit	*Hydrocharis morsus-ranae*	bait bucket, trailer (MI)
Fourspine Stickleback	*Apeltes quadracus*	bait bucket, fish transfer (PA)
Heterosporis parasite	*Heterosporis sp.*	fish transfer, bait bucket (WI)
Hydrilla	*Hydrilla verticillata*	aquarium, bait bucket (PA, TN)
Giant cladoceran	*Daphnia lumholtzi*	ballast water, bait bucket (IL)
Giant salvinia	*Salvinia auriculata complex*	aquarium, bait bucket (TX, GA)
Monkey goby, Sand goby	*Neogobius fluviatilis*	ballast water (EA)

New Zealand mudsnail	*Potamopyrgus antipodarum*	bait bucket, trailer (ONT, ID, UT)
Roach	*Rutilus rutilus*	ballast water (EA)
Snakehead fish	Channidae	fish transfer, food (FL, NC)
Spring viremia of carp	*Rhabdovirus carpio*	fish transfer, bait bucket (WI)
Tyulka, Kilka shad	*Clupeonella cultriventris*	ballast water (EA)
Walking catfish	*Clarias batrachus*	fish transfer (CT, FL, GA, MA)
Whirling disease in salmon	*Myxobolus cerebralis*	mud on waders, fish transfer (MI)
Zander	*Stizostedion lucioperca*	ballast water, aquaculture (NY)

Detected species (found in the State of Indiana)

Common name(s)	Scientific name or taxon	Pathway(s)
Alewife	*Alosa pseudoharengus*	ballast water, fish transfer
Asian tiger mosquito	*Aedes albopictus*	containers holding water, tires
Asiatic clam	*Corbicula fluminea*	bait bucket, trailer
Bighead carp	*Hypophthalmichthys nobilis*	fish transfer
Bluegreen algae	*Cylindrospermopsis spp.*	bait bucket, trailer
Fishhook water flea	*Cercopagis pengoi*	ballast water, bait bucket, trailer
Flowering rush	*Butomus umbellatus*	wetland plant transfer
Brazilian elodea	*Egeria densa*	aquarium, bait bucket, trailer
Cabomba	*Cabomba caroliniana*	aquarium, bait bucket, trailer
Chinese mystery snail	*Cipangopaludina spp.*	aquarium, bait bucket
Common carp	*Cyprinus carpio*	fish transfer, bait bucket
Common waterweed	*Egeria densa*	aquarium, bait bucket, trailer
Eurasian watermilfoi	*Myriophyllum spicatum*	trailer, bait bucket
Gizzard shad	*Dorosoma cepedianum*	fish transfer, bait bucket
Grass carp	*Ctenopharyngodon idella*	fish transfer from private pond
Largemouth bass virus	virus	fish transfer, bait bucket, live well
Common reed, Giant reed	*Phragmites australis*	wetland plant transfer
Purple loosestrife	*Lythrum salicaria*	wetland plant transfer
Reed canary grass	*Phalaris arundinace*a	wetland plant transfer
Round goby	*Neogobius melanostomus*	ballast water, bait bucket
Rudd	*Scardinius erythrophthalmus*	fish transfer, bait bucket
Rusty crayfish	*Orconectes rusticus*	bait, native in southern Indiana
Sea lamprey	*Petromyzon marinus*	ballast water
Silver carp	*Hypophthalmichthys molitrix*	fish transfer
Spiny water flea	*Bythotrephes cederstroemi*	ballast water, bait bucket
Tench	*Tinca tinca*	fish transfer, bait
Threespine Stickleback	*Gasterosteus aculeatus*	bait, fish transfer
Water hyacinth	*Eichhornea azuria*	trailer, private ponds
West Nile virus	Flaviviridae	containers holding water, birds
White perch	*Morone Americana*	fish transfer, bait bucket
Zebra mussels	*Dreissena polymorpha*	bait bucket, trailer, ballast

Much of the information for the descriptions in this section was derived from Indiana DNR publications, the USGS Nonindigenous Aquatic Species website (http://nas.er.usgs.gov/), and publications from Illinois-Indiana Sea Grant.

Nuisance fish

Fisheries in Indiana support both leisure activities and commercial enterprises. The 1991 National Hunting and Fishing Survey reported that anglers made over 1,846,300 fishing trips to Indiana streams at an annual economic value of $57 million. An average of 502 inland commercial fishing licenses and 1,782 net tags were sold annually in the state of Indiana from 1977 to 1994 (Carnahan 1995). The average inland commercial fishing harvest was 165,360 pounds annually. By 2003, the rapidly growing number of charter boat companies, that take people fishing for hire, had reached over 75 businesses in Indiana. Canoe liveries, campgrounds, and other support services for recreational users also rely on high quality aquatic systems. As an example, the Department of Natural Resources has a multi-million dollar investment in the waters of the St. Joseph River as a salmonid stream. Public attention to the

St. Joseph River in South Bend and Mishawaka has resulted in long-term development of a unique salmon fishery in a $15 million joint effort with the state of Michigan that annually generates about $6 million in income to local communities. These investments in quality of life along rivers in urban areas and other parts of the state may be jeopardized by lack of sufficient control on invasive species.

Recreational and commercial users of state waters recognize the critical importance of protecting these resources. Eighty-one percent of anglers polled in 1994 felt that the Division of Fish and Wildlife should increase the emphasis on protecting Indiana streams and rivers from pollution. Introduction of exotic species can have a longer-term and more irreversible impact on important fish communities than other kinds of pollution. At least 45 invasive fish species are known from the Great Lakes. A few examples of nuisance fish are described below. A complete list of all known exotic fish and crayfish is provided in Appendix A.

Sea lamprey: The invasion of the sea lamprey in the 1940s has resulted in substantial economic losses to recreational and commercial fisheries, and has required annual expenditures of millions of dollars to finance control programs. During the 1940s and 1950s, the sea lamprey, a top predator which kills fish by attaching to its prey and feeding on body fluids, devastated populations of whitefish and lake trout. Their aggressive feeding behavior contributed significantly to the collapse of fish species that were the economic mainstay of a vibrant Great Lakes fishery (Great Lakes Fishery Commission, undated). For example, before sea lampreys entered the Great Lakes, Canada and the United States harvested about 15 million pounds of lake trout in lakes Huron and Superior annually. By the early 1960s, the catch was only about 300,000 pounds. In 1992, annual sea lamprey control costs and research to reduce its predation were approximated at $10 million annually. Ongoing control efforts have resulted in a 90% reduction of sea lamprey populations in most areas, creating a more amenable environment for fish survival and spawning. The total value of the lost fishing opportunities plus indirect economic impacts in the Great Lakes could exceed $500 million annually (Office of Technology Assessment, 1993).

Silver and bighead carp: Similar to the closely-related silver carp, the bighead carp is a filter feeder that prefers large river habitats. These so-called Asian carps have been used in many parts of the world as a food fish and sometimes introduced in combination with silver carp into sewage lagoons and aquaculture ponds (Jennings 1988). Approximately 176,400 pounds per month of live food fish, mostly Asian carp species, are sold in Toronto markets (Dennis Wright, Fisheries and Oceans Canada, pers. comm., July 22, 2003). Many of these fish may be transported live through Indiana from fish farms in the southern states, especially Arkansas. The impact of these two species in the United States is not adequately known. The largest bighead carp reported from Indiana waters was 53.5 pounds, but they are known to reach 90 pounds elsewhere in the United States. Silver carp reach lengths of three feet and weights of 60 pounds. Because bighead carp and silver carp are planktivorous and can attain a large size, Laird and Page (1996) suggested these carp have the potential to deplete zooplankton populations. As Laird and Page pointed out, a decline in the availability of plankton can lead to reductions in populations of native species that rely on plankton for food, including all larval fishes, some adult fishes, and native mussels. In some of the big pools along the Mississippi River, Asian carps have multiplied so quickly that in less than a decade they make up 90 percent or more of the fish life. Several species of fish with high recreational and commercial value are most at risk from such competition in large rivers and Lake Michigan including paddlefish, bigmouth buffalo, salmon, walleye, and perch. To date, populations of bighead carp have been reported in every large river system up to the first dam that blocks upstream movement, including lower portions of the Wabash River and some tributaries up to Huntington Dam, on the Tippecanoe River up to Oakdale dam (forms Lake Freeman), lower portions of the White River to Williams Dam on the East Fork of White River and up to dams at Martinsville or higher along the West Fork of White River, and in embayments along the Ohio River. Silver carp are likely to be distributed similarly to bighead carp. Silver carp have been taken from the lower portions of the Wabash River at least to Lafayette, along portions of the Ohio River, and the West Fork of White River in Greene County.

Black carp: The black carp is a bottom-dwelling molluscivore that has been used by U.S. fish farmers to prey on and control disease-carrying snails in their production ponds. Black carp are superficially very similar in appearance to the grass carp. The grass carp is legal to use for aquatic plant control in private ponds in Indiana as a genetically modified fish that cannot reproduce. As such, Nico and Williams (1996) expressed concern that if black carp become more common in U.S. aquaculture, there will be an increased risk that the species be misidentified and unintentionally introduced to some areas. It is highly probable that black carp would feed on and reduce populations of native mussels and snails (Nico and Williams 1996). There are 26 species of mussels listed as endangered or threatened in Indiana, including 10 federally endangered species, which would likely be further affected by black carp introductions. Sterilization of black carp for aquaculture use does not eliminate the ecological risk posed by these fish (USFWS 2002). A sterile adult black carp is capable of eating 3 to 4 pounds of mollusks a day and can live up to 15 years. The methods used to produce sterile fish do not guarantee 100 percent sterility, meaning that a small percentage of fertile fish may be found among groups of sterile fish. To date, there have been no reports of black carp found in Indiana waters.

White perch: White perch are naturally found in brackish waters of the Atlantic coast, but invaded the lower Great Lakes during the late 1980s. The fish is a food fish and provides angling opportunities, but tends to stunt and become undesirable when over-population occurs in freshwater lakes (Scott and Crossman 1990). Through competition with native species, predation on fish eggs, preying on young fish, and hybridization with white bass, white perch can quickly become the dominant species in freshwater lakes. White perch are thought to cause declines in walleye (Schaeffer and Margraf 1987), yellow perch (Parrish and Margraf 1990), and white bass (Todd 1986) in the Great Lakes region. White perch have been collected in Indiana from Lake Michigan and more recently from Wolf Lake and Cedar Lake in Lake County and Koontz Lake in Marshall County. Although white perch may have migrated from Lake Michigan to Wolf Lake, this fish was probably illegally stocked in Cedar Lake and Koontz Lake within the past five years. The invasion by white perch can degrade fishing quality. A 2001 fisheries survey showed that white perch had rapidly overwhelmed the fish community in Cedar Lake, constituting eighty-eight percent (88%) by number and 67% by weight of the fish caught. Similar to Cedar Lake, white perch was the most abundant fish by number (49%) and weight (25%) in a 1999 survey of Wolf Lake. White perch in these Indiana lakes grow to a maximum size of 11.5 inches and average weight of 7-13 ounces. This species must not be confused with the native freshwater drum, which may commonly be referred to as a "white perch" in parts of southern Indiana.

Nuisance insects and crustaceans

Asian tiger mosquito: Public health threats can result from the introduction of insects and other animals that serve as vectors for the parasites and diseases of humans and domesticated or native animals. For example, the Asian tiger mosquito is a tropical insect from Asia and Africa that was most likely brought into the country through the worldwide transport of used tires. It is now established in most states east of the Mississippi River (Dr. Robert Novak, Associate Professional Scientist for the Illinois Natural History Survey and Associate Professor, University of Illinois, Champaign/Urbana). It is solely a container breeder, with the larval stage living in discarded tires, pails, flower pots, and any pool of water that lasts longer than a few days, and does not breed in naturally-occurring water bodies. It can serve as the intermediate host for many mosquito-borne diseases, including dengue hemorrhagic fever, dog heartworm, and possibly West Nile virus. According to state medical entomologist Dr. Michael J. Sinsko, the Asian tiger mosquito was first discovered in Indiana in Vanderburgh County on September 15, 1986. Since that time, they have been documented in the following counties: Vanderburgh, Marion, Dearborn, Shelby, Daviess, Gibson, Dubois, Perry, Warrick, Posey, Jackson, Spencer, Lawrence, Greene, Knox, Clark, Martin, Bartholomew, Washington, Crawford, Pike, Floyd, Orange, Ohio, Harrison, Sullivan, Scott, Owen, and Jefferson.

Giant cladoceran: An exotic zooplankton species, *Daphnia lumholtzi*, is native to Africa, Asia, and Australia and was most likely brought to North America with African fish imported for the aquarium trade or to stock reservoirs. Since 1995, it has been found in the Illinois River and a connecting channel to Lake Michigan through Chicago and now appears close to invading Lake Michigan. Cladocerans, also known as water fleas, are small zooplankton that are an important food source for larval and early juvenile stages of nearly every species of North American fish. *Daphnia lumholtzi* is much larger and has more numerous spines than similar native species. The large spines make it difficult for young fish to eat this exotic. Protection from predation could give it a competitive advantage over the more edible native species. This could result in reduction of food available in lakes, streams, and fish hatcheries where this zooplankter invades. Sportfish susceptible to impacts would be late-spawning species such as bass and other sunfish.

Rusty crayfish: Rusty crayfish are invasive crustaceans that are native to southern Indiana within the Ohio River drainage, but have been spreading to lakes, rivers, and streams in other parts of North America and Ontario. They are more aggressive than other native crayfish, better able to avoid fish predation, and can harm native fish populations by eating their eggs and young. They can displace native crayfish, hybridize with them, and graze on and eliminate beneficial aquatic plants. They have likely spread by bait buckets and aquariums, activities of commercial bait harvesters, and live study of specimens purchased from biological supply houses. Females can carry fertilized eggs or a male's sperm, so even the release of a single female could establish a new population. Eradicating established infestations is currently impossible.

Spiny water flea and fishhook water flea: The spiny water flea, a likely ballast water introduction, is a tiny crustacean (related to shrimp and crabs) with a sharply barbed tail spine. The northern European native was first found in Lake Huron in 1984. The spiny water flea is now found throughout the Great Lakes, including Lake Michigan, and in some inland lakes in nearby states. Another invasive zooplankton, called the fishhook water flea, was first found in Lake Ontario in 1998. It has since been reported from the southern waters of Lake Michigan and was most likely transported in the ballast water of ships. Many other predatory fish avoid them as prey and most smaller fish cannot effectively consume them because they cannot ingest the long hooked tail spine. These large zooplankton are nearly a half inch long and may compete for food with young fish, such as yellow perch, that also eat small zooplankton. The long tail spine of these two water fleas is irritating to anglers whose lines become entangled with "globs"

of the fishhook flea. Anglers and other recreational water users can avoid transferring these species by emptying water from live wells, bait buckets, and other equipment before using them in inland waters of the state.

Nuisance mussels and snails

Zebra mussel: The zebra mussel, another ballast water introduction, is one of the best known invaders of the Great Lakes region and other areas of the country where it has spread. This aquatic nuisance species has caused serious economic and ecosystem impacts. The zebra mussel, a highly opportunistic mollusk, reproduces rapidly and consumes microscopic aquatic plants and animals from the water column in large quantities. The potential impact on the fishery can be profound due to changes in food availability and spawning areas, to name a few. Economic impacts are as pervasive as the ecosystem impacts. Due to the infestation of zebra mussel in their intake and discharge pipes, Great Lakes municipalities, utilities, and industries have significant costs associated with monitoring, cleaning, and controlling infestations. According to a recent economic impact study, each of 84 Great Lakes water users reported average total expenditures of $513,600 over the five-year period from 1989 to 1994 (Hushak et al., 1995). By the end of this century, water users across the country are expected to spend between $2 billion and $3 billion cleaning clogged water intakes (Ruiz et al., 1995). Commercial and recreational vessels and beach areas also are vulnerable to the negative impacts of the zebra mussel.

Oriental mystery snails: The Chinese (or Japanese) mystery snail is native to Burma, Thailand, South Vietnam, China, Korea, and Asiatic Russia in the Amur region, Japan, the Philippines, and Java. These snails have been collected from Fall Creek and West Fork of White River, Marion County, Indiana; and five drainages in Illinois. The closely related Japanese trap door snail has been found on the west coast of North America but has not been collected from Indiana. Chinese mystery snails live partially buried in the mud or silt of lakes, ponds, rice paddies, irrigation canals, roadside ditches or slower portions of streams. They prefer quiet water where there is some vegetation and a mud substrate. This species was probably introduced through accidental or intentional releases from the aquarium industry. It can serve as a vector for various parasites and diseases, some of which may infect humans. Shells of large exotic snails have been clogging intake screens at the IPALCO Stout and Perry K power generating plants in Marion County (Terry Hogan, pers. comm. Cinergy Corporation, 2 October 2000). The snails have not been found at the Pritchard power plant in Morgan County. The large conically shaped shell creates a troublesome problem for the plant maintenance, as the shells clog the cooling water condenser tubes. The snails are an operculated species, having a "trap door" over their entrance and thus, can simply close up and wait for an intermittent biocide to pass by without controlling the snails.

New Zealand mudsnail: The New Zealand mudsnail is a small aquatic snail, about one-eighth of an inch long. As its name states, this species is native to freshwater lakes and streams of New Zealand. Like many organisms today, it is being incidentally carried to many locations around the world such as Europe, Asia, and North America. In the U.S., this snail was first detected in the mid-1980s in the Snake River region of Idaho. Since then, it has spread to waters of Montana, Wyoming, California, Arizona, Oregon, and Utah. The only known population in the eastern U.S. is in Lake Ontario where a population was discovered in the early 1990s. Mudsnail densities of over one-half million per meter square in western streams are a cause for concern. Because the West is known for abundant trout and productive fishing spots, there is concern that the mudsnails will impact the food chain for native trout and the physical characteristics of the streams themselves. Research is needed to determine the impacts of large populations of mudsnails on the native fauna, such as aquatic insects and native snails, and on any changes in the physical environment.

Diseases, pathogens, and parasites

Although not many diseases of coldblooded aquatic animals are zoonotic (transferable to humans), there are some diseases transmitted by mosquitoes (e.g., West Nile virus) or other waterborne vectors (e.g., cholera). To date, the greatest threat of disease has been affects on domestic, commercial, and recreational fish stocks. Since the 1980s, all trout and salmon brought into Indiana under aquaculture or importation permits must be inspected for a number of diseases. Infected fish or fish showing signs of disease cannot be stocked into state or private waters. Diseases of trout and salmon that are unknown from the Great Lakes basin and strictly regulated include viral hemorrhagic septicemia, infectious hematopoietic necrosis virus, ceratomyxosis, and proliferative kidney disease. Other salmonid diseases known from the Great Lakes but not found in Indiana waters are infectious pancreatic necrosis virus, bacterial kidney disease, furunculosis, enteric redmouth disease, and EED virus. Anglers are advised to remove all mud and water from waders and other fishing equipment, if they have been fishing in lakes or streams in other states, and not to transfer live fish or fish parts between waters. Aquarium fish must not be released to state waters, as they may be carrying diseases or parasites. The Indiana DNR contracts with the Animal Disease Diagnostic Lab (ADDL) at Purdue University to examine fish suspected of disease. Large fish kills and strange behaviors in populations of fish should be reported to the DNR for investigation.

Heterosporis: The fish parasite, *Heterosporis sp.*, was found in fish muscle tissue from yellow perch in Wisconsin, Minnesota and

Ontario in 2000 (Wisconsin DNR, 2002a; Wisonsin DNR, 2002b). Previously, this genus of parasites was unknown from North America and had only been reported from aquarium species such as angelfish, bettas and cichlids, and the Japanese eel. This infection does not seem to cause direct mortality, but when an infected fish dies, other fish may eat infected muscle or the infected muscle may break down, releasing spores into the water, which are then acquired by other fish. In severely infected fish, almost 90% or more of the fillet is actually made up of the parasite's spores, rather than muscle tissue. There is no evidence that *Heterosporis* can infect people. However many people discard infected fish because changes in texture and quality of the flesh make the fish appear to be freezer burned even as a fresh fillet. The disease has been seen in walleye, yellow perch, sculpin, and northern pike. In the laboratory, rainbow trout, channel catfish, walleye and fat head minnows also readily hosted the parasite. Largemouth bass and bluegills could be infected, but the degree of infection was less severe. Fisheries biologists in Indiana are interested in any similar reports in fish from state waters.

Largemouth bass virus (LMBV): Largemouth bass virus (LMBV) ceased being a "southern phenomenon" when it caused a kill at 565-acre Lake George, along the border between Indiana and Michigan, in August 2000. Previously, LMBV had only been documented from kills during the heat of the summer at southern U.S. reservoirs. To date, LMBV has been detected in bass from five northeast Indiana natural lakes and Dogwood Lake in Daviess County. LMBV first gained attention in 1995, when it was implicated in a fish kill on Santee-Cooper Reservoir in South Carolina. Scientists do not know how the virus is transmitted between fish or how it is activated into a fatal disease. Along with hot weather, stress factors might include poor water quality caused by pollution and frequent handling by anglers. Most bass infected with LMBV appear completely normal. The LMBV appears to attack the swim bladder, so diseased fish will be near the surface, have trouble swimming in an upright position, and may appear bloated. Adult bass of two pounds and more seem to be the most susceptible to disease, or at least the most visible. Although largemouth bass die-offs have received considerable attention, LMBV-related kills have been minor in comparison to kills prompted by other causes, such as pollution. Fisheries biologists in Indiana continue to monitor populations where largemouth bass die-offs occur. Scientists know of no cure, as is commonly the case with viruses. Transmission may be prevented by avoiding transfer of water or fish between waters and reducing stress on fish where possible.

West Nile virus: Since West Nile virus (WNV) was first isolated in 1937, it has been known to cause asymptomatic infection and fevers in humans in Africa, West Asia, and the Middle East. Human and animal infections were not documented in the Western Hemisphere until 1999. In 1999 and 2000, outbreaks of WNV encephalitis (inflammation of the brain) were reported in persons living in the New York City metropolitan area, New Jersey, and Connecticut. The Centers for Disease Control reported that the disease grew rapidly from an initial U.S. outbreak of 62 disease cases in 1999 to 44 states reporting 4,156 cases, including 284 deaths, in 2002 (CDC, 2003). The USGS database reports 312 cases from Indiana in 2002 and predominantly in the northeastern quadrant of the state (USGS, undated). West Nile virus may be transmitted when an infected mosquito bites a human to take in blood. Mosquitoes become infected when they feed on infected birds, which may circulate the virus in their blood for a few days. In addition, recent investigations confirmed WNV transmission through transplanted organs and transfused blood. The recent introduction of routine WNV screening of blood donations should greatly reduce the risk of spread of WNV through transfused blood. Only about two persons of every 10 who are bitten by an infected mosquito will experience any illness. Although illness from WNV is usually mild, serious illness and death are possible, particularly for persons over the age of 50. West Nile virus is spread by a "filth mosquito," referred to as such because it prefers to reproduce in stagnant standing water. A survey in Indiana showed that two-thirds of the breeding sites for the mosquito consisted of discarded tires that held small pools of water (NRCS, 2003). Three simple actions can help prevent infection: avoiding mosquito bites by using insect repellants with DEET and wearing light, long-sleeved clothing, mosquito-proofing properties by emptying standing water and installing screens, and reporting dead birds to local health authorities.

Whirling disease (WD): Whirling disease is caused by *Myxobolus cerebralis*, which is a native myxosporidean fish parasite in salmonids from Europe. The parasite penetrates the head and spinal cartilage of fingerling trout, where it reproduces rapidly, causing the fish to swim erratically, negatively affecting feeding ability and predator avoidance behavior. Severe infections can result in high rates of mortality and skeletal deformities that persist in adult fish. Spores released when the fish dies are nearly indestructible and can survive in sediments for 20 to 30 years. It was unintentionally introduced to the eastern United States in the late 1950s in shipments of frozen trout that harbored spores of this fish parasite (Markiw 1992). The parasite devastated rainbow trout populations in Colorado, Montana, and other western states in the 1990s. The life cycle of the parasite can only be completed in earthen-bottomed rearing ponds inhabited by Tubifex worms, the second host of the parasite. Fish transfers probably spread the disease to other states. Whirling disease has not been detected in Indiana, although it is known from several rivers and private hatcheries in Michigan and has occurred in adjacent states of Ohio, Pennsylvania, and New York (Whirling Disease Foundation, undated).

Spring viremia of carp (SVC): An exotic fish virus, spring viremia of carp, was suspected of killing more than 10 tons of carp in a lake in northwestern Wisconsin (Wisconsin DNR, 2002c). The diagnosis was the first documented occurrence in wild fish in the United States. Spring viremia of carp (SVC) was previously diagnosed in a North Carolina fish farm that raises an ornamental carp variety called koi. The virus, which is widespread in Europe and found in Russia, Asia and the Middle East, cannot infect humans. The disease is an international animal health concern, however, and covered under an international treaty that requires confirmation of the virus by a designated laboratory, reporting to international animal health authorities, and other measures. Only members of the minnow family, which include carp, are naturally susceptible to the virus, but northern pike fry also have been infected in laboratory studies. Effects on other species can create problems for fisheries and aquaculture production, potentially affecting large areas, if the virus has passed to downstream waters in the Mississippi River basin. Spring viremia in carp strikes primarily in the spring or fall, when fish immune systems are suppressed due to very cold water temperatures. Signs of the fish disease include a fluid buildup in the body cavity, small hemorrhages on the skin, the belly, and hemorrhages on the swim bladder. Infected fish become diseased and can die within 10 to 17 days. Fisheries management agencies and the USDA APHIS program are monitoring wild carp and aquaculture facilities to determine any distribution of the disease in other areas.

Aquarium pets caught from Indiana waters

Keeping pets in home aquaria and backyard ponds is a relatively recent venture. It is also posing unforeseen risks when aquarists and aquaculture farms do not properly manage these pets. The earliest known keepers of captive fish were the Sumerians, who kept fish in artificial ponds at least 4,500 years ago. Although the English kept goldfish in glass containers during the 1700s, keeping a thriving aquarium was not common until the relationships between oxygen, animals, and plants were understood a century later and technology was developed to maintain adequate water quality conditions in small tanks. The circus entrepreneur P.T. Barnum opened the first display aquarium on this continent in 1856 at the American Museum in New York City.

Species that make good aquarium fish are tough survivors. Trying to keep fish alive in a tank can be difficult unless those species are adaptable to a wide range of water quality, variable temperatures, and possess fairly general feeding habits. Aquarium fish must tolerate being shipped in containers having low dissolved oxygen or which are exposed to fluctuating temperatures. They have fairly general food habits, eating prepared artificial diets rather than requiring a particular form of prey or plant. Aquarium fish may reproduce rapidly under fairly general conditions, allowing them to be economically raised on fish farms.

Several decades ago, the only fish available were the few species carried by the local dime store, usually goldfish or guppies. With the advent of global commerce and the internet, it is now possible for a home aquarist to order one of hundreds of species of fish and have it shipped from nearly anywhere in the world. Fish shipped for aquarium purposes are generally exempt from state importation laws, so the state has no way of tracking which species are coming into Indiana and which ones might be problematic if released into the wild.

Many of the tropical fish and other species sold in pet stores will not survive an Indiana winter. Even if a single individual survives, it would need others of its kind to reproduce. Many tropical species like Tilapia (cichlids) die in water temperatures below 50 degrees. However, evidence suggests that as generations of fish and plants are kept in aquaria, some of them can become more adapted to the conditions of northern waters. Strains of various tropical species are under development for aquaculture so that they will survive lower temperatures or saltier water. These species that normally would not survive in colder waters may have become domesticated and now have a better chance of survival in new environments. Some species may be tropical distributions, not because they could not survive in cold water, but because they never had the opportunity to move to cold areas. Threats associated with the parasites and diseases that the pets may be carrying could be even greater than direct problems related to the animal itself.

A number of Indiana residents overwinter or visit in Florida or other southern states. When Hoosiers are south for the winter, they should keep in mind that problems with releases of aquarium fish are extreme in warmer states. While Indiana currently hosts over 40 species of introduced fish, established exotic fish in Florida number over 120 species. Nationwide, about 1 in 4 new species originates from the aquarium trade. In Florida, about 75 percent were introduced from aquaria or farms raising aquarium fish.

Moving fish from one waterbody to another is stocking fish. This includes fish from an aquarium, backyard pond, and live fish from a bait bucket. It is illegal to stock fish without a permit. Most native fish do not need a boost from stocking. Fish like bass, bluegill, and catfish will generally reproduce and thrive in areas where the water quality and habitat are available to sustain them. The DNR fisheries biologists carefully survey lakes and rivers before determining where stocking might help establish a new fishery without damaging the existing fish community.

Moving fish around can cause serious problems for the resident fish. The difficulty with detecting and tracking fish diseases makes

it hard to predict the impacts of transferring sick fish. Fish may be carrying diseases or parasites without looking or acting sick. Bacteria, viruses, parasites, and the microscopic young of other species may be contained in the water dumped along with the fish. Largemouth bass virus, previously thought to be only in southern lakes and rivers, was recently discovered in Lake George along the Indiana-Michigan border and may be in other lakes or rivers. The impacts of this new disease are not completely understood but it has been implicated in fish kills in southern states. Zebra mussels are easily transported to previously clean waters without even being aware of it. The baby mussels, called veligers, are microscopic and nearly colorless.

The most cost-effective, and often the only, defense against introduced species is prevention. While laws can be passed that affect ownership or release of species, they can be difficult to enforce. Indiana relies mostly on the ethics of aquarium owners in properly caring for their pets to keep our native fish and wildlife populations safe and healthy. It is up to the aquarium owner and dealers to be the first line of defense.

If anglers do catch an unusual fish, the IDNR asks that they measure its length, take a close-up photograph, save it by freezing, and report the find to a district fisheries biologist. By tracking exotic fish, state natural resource managers may be able to identify potential problems before they develop. The following aquarium fish and other aquatic pets were caught from Indiana waters within the last few years. Nearly all were identified by professional biologists with the exception of some of the "piranha," that were probably actually pacu.

- Three live alligators several feet in length were recovered from the Wabash River, Huntington County in July 2001 and one from a creek in Parke County on August 30, 2003.
- A 48-inch caiman was found in a private pond in Marion County on June 30, 2002.
- Two specimens of the Oriental weatherfish, family Cobitadae (loaches) *Misgurnus anguillicaudatus*, were caught near the Hammond WTTP outfall on the West Branch of the Grand Calumet River, Indiana, on 11/4/02. The native range of this popular aquarium fish is eastern Asia, including Russia, North Korea, Japan, China, Myanmar/Burma, and North Vietnam.
- A 20-inch long Aruana was caught in Lake George, Lake County, on October 15, 2000 and another Aruana from Deep River, Lake County, September 2003.
- Dead shells of Oriental Mystery Snails clogging intake screens at two power plants along the West Fork of the White River. The snails are used in aquaria and backyard ponds.
- A 10-inch dead tiger oscar was found in Blue Lake, Whitley County on January 27, 2003.
- A 5.9-inch bala shark was captured in a gill net by DNR biologists from Diamond Lake in July 1995.
- Piranha or pacu were caught by anglers as follows:
  - 14-inch pacu from Praxair dam on the East Branch of the Little Calumet River, Porter County, August 2003;
  - piranha from Cedar Lake, Lake County, August 2002;
  - 15-inch pacu from Lake Shafer, White County, August 2002;
  - 2.7-pound pacu from St Joseph River, St Joseph County, July 2002;
  - two 10-inch piranhas White River, Delaware County, August 2002;
  - 8.75-inch pacu private pond, Delaware County, August 2000;
  - several unconfirmed piranha were reportedly caught from ponds in Clay County;
  - seven piranha city park pond, Boone County, July 2002;
  - 14-inch pacu Griffy Lake, Monroe County, July 2001; and
  - 15-inch pacu gravel pit, Johnson County.
- A 9.9-inch tinfoil barb (*Barbus schwanefeldi* or *Barbodes schwanenfeldii*) was caught in a District 6 Fisheries survey in West Brazil Pond, Clay County, in 2001.

Many large tropical fish can be kept, as long as the owner complies with the law and is prepared to care properly for the pet. Oversized, unwanted aquarium pets should be traded with someone or dispose of properly. Release of large aquarium fish may be mostly related to buying species that grow to unmanageable sizes. Most of these fish are very small–the size of a quarter–in the pet store, but can get as big as a dinner plate within a year or two. The 20-inch long Aruana caught in Lake George near Hobart last year was probably only two inches long when the aquarist bought it. Most people do not own an aquarium that can handle a two-foot long fish and would not be able to keep it fed properly.

Some of them have feeding habits that are difficult to accommodate unless the pet owner has a steady supply of minnows or goldfish for the pet to devour. Most of these pets will chase and kill other fish in the tank until only one big fish is left. Finding a way to dispose of a big dead fish may not be pleasant.

Pacu, piranha, arowana, and some tropical catfish are among the species require extra care and grow to large sizes. While the scientific names of fish don't change, the common names that a fish is sold by may vary. There are at least 15 species of piranha sold in aquarium stores. Pet owners must conduct some research on the species they are thinking of buying or get fish from a store where the sales people will tell the pet owner how large it will get and what it will need to eat. Responsible pet owners are the first and possibly only line of defense to prevent problems associated with release of these species. Further investigation of the educational and regulatory needs surrounding this issue are most likely necessary.

Nuisance plants

Nonindigenous aquatic plants also have been introduced to the Great Lakes region and inland waters. These plants can be unintentionally transported, as fragments hanging on boat trailers or floating in live wells and bait buckets. They may be dumped intentionally from aquaria or drift due to flooding of backyard ponds. Sales in the aquatic gardening industry are now reaching approximately $1 billion per year (Kay and Hoyle, 2001). The IDNR Division of Entomology and Plant Pathology licenses over 5,000 nurseries and other facilities that sell terrestrial and aquatic plants. In an investigation of aquatic plant sales from vendors across the United States, supported by the Minnesota Sea Grant and Minnesota DNR, 90 percent of the shipments contained a mixture of species that were not part of the order. Additionally, out of 14 attempts to order prohibited or noxious weeds, they were received 13 times (93 percent), including plants that were illegal to ship across state lines (K. Maki and S. Galatowitsch, unpublished manuscript). A more extensive list of nuisance aquatic plants that may be problematic for Indiana is provided in Appendix B.

Bluegreen algae: There are more than 50 major types of freshwater blue-green algae, and about one-third of them can produce some form of toxin. Blue-green algae are generally a harmless, natural part of the water system in small numbers. But when they dominate the plant community, the algae can interfere with the ecological health and human use of the water by producing offensive taste and odor compounds and sometimes forming a thick scum on the surface. One of the bluegreen algae species, *Cylindrospermopsis*, originally found in Australia, Brazil, and more recently in Florida and North Carolina, was thought to be a subtropical organism. However, the species was found blooming and producing toxin in Ball Lake, Steuben County, Indiana, in August of 2001. The organism has since been identified in several other large reservoirs around the state. Along with many other exotic and nuisance organisms, *Cylindrospermopsis* could potentially be spread by human or natural influences. People exposed to blue-green algal blooms by swimming in affected lakes or rivers have experienced skin irritations, allergic reactions, gastrointestinal symptoms, and respiratory problems. Several other bluegreen algae species release compounds into the water that can cause taste and odor to be so objectionable that the water is deemed unfit for consumption. Standard methods of treating drinking water are thought to remove these toxins. Filtration of taste and odor problems at high levels can require more expensive or cost-prohibitive treatment methods. In 1989 and for several years since 2000, all major surface sources of drinking water for the city of Indianapolis have been chemically treated to reduce populations of bluegreen algae, at a high cost to the utility and its customers, as well as incurring the risks to the ecosystem associated with use of herbicides.

Brazilian elodea: Brazilian elodea has been found in Indiana waters, including a thriving population in Griffy Lake in Bloomington, Indiana. The plant looks very much like a larger, more robust version of its commonly-found native relative, *Elodea canadensis* (waterweed). Stems are erect, cylindrical, simple or branched and grow until they reach the surface of the water where they form dense mats. In Griffy Lake, the Brazilian elodea appears to be overtaking established populations of another nuisance exotic, Eurasian watermilfoil.

Common reed: Common reed (*Phragmites*) is a widely distributed wetland plant found on five continents. It can grow up to 20 feet high in dense stands in wetlands and is long-lived. This plant is capable of reproduction by seeds, but primarily does so asexually by means of rhizomes. Research has shown that native and introduced varieties of this species currently exist in North America. The species is invasive in eastern states along the Atlantic Coast and increasingly across much of the Midwest and in parts of the Pacific Northwest. The plant has been common along roadside ditches in northwest Indiana, but appears to be spreading throughout the state. Where it occurs in abundance, it can change a diverse wetland community to a monoculture, decreasing the wildlife habitat value of the area.

Hydrilla: Hydrilla is a European species that is thought to have been introduced to Florida sometime during the 1950's. It is an aggressive, invasive species and has spread throughout Florida and most southern states, as well as California, Delaware, and the District of Columbia. Hydrilla has been categorized as one of the world's worst weeds and is certainly among the most notorious of submerged aquatic plant species. It may be found in all types of water bodies. Hydrilla is a submersed plant that can grow to the surface and form dense mats. The plant stems are slender, branched and up to 25 feet long. Infestations of Hydrilla are extremely severe and can completely choke entire lakes and public water supplies. There are no effective control measures against Hydrilla

once it has become established in a region. The plant is not known from Indiana waters.

Eurasian watermilfoil: Eurasian watermilfoil is an exotic aquatic plant that rapidly invades shoreline areas by forming dense mats across the surface of the water and can grow into fairly deep water. The plant is suspected to have been an accidental release from an aquarium and was first detected in Washington, D.C. in 1942. By 1950, it was found in Arizona, California, and Ohio. There are about 616 lakes in northern Indiana. Eurasian watermilfoil is currently reported from 175 Indiana lakes and reservoirs in this natural lakes region (compared to 75 in Minnesota and 190 in Wisconsin). This plant affects recreational and source water use in at least 58,981 acres in northern Indiana and 67,438 acres in southern Indiana. This nonnative milfoil crowds out desirable native vegetation, provides no desirable food for waterfowl or wildlife, and makes waterways unsuitable for boating, fishing, and swimming.

Traditional control methods may be less effective than biological control for this particular plant. Mechanical harvesting actually spreads milfoil, because the plant reproduces through fragmentation. Herbicides that are effective against milfoil are also very expensive and may have secondary effects on other plants or animals in the water. During 1998, 160 permits were issued for herbicide treatment of nuisance aquatic plants, the vast majority of which targeted milfoil (84 percent of the treatment area). Nuisance filamentous algae was a common target statewide. The average permit in northern Indiana was for treatment of 11 percent of the surface area, while 52 percent of the surface of southern Indiana lakes was treated.

Lakes treated for nuisance plant growth were three times larger than average for the region, averaged 310 acres in size, had more shallow areas, a greater number of lakefront homes, and tended not to be dominated by bluegreen algae. A report on the St. Joseph River basin indicated that "lakes with public access sites have a greater tendency to have problem densities of weeds, because species are transferred by boats and trailers" (Wesley and Duffy, 1998). This pattern was also indicated in the statewide survey in 1998. Eurasian watermilfoil and curly-leafed pondweed were prevalent in lakes in northern tier of counties and all northeastern counties in natural glacial lakes. Eurasian watermilfoil occurred in reservoirs across the central portion of the state that were generally located in state parks with high recreational use and near large metropolitan areas. Exotic aquatic plants were not reported from reservoirs in the upper Wabash River watershed in north central Indiana or from southern counties in the Ohio River and lower Wabash River watersheds. Control by any method is usually temporary due to repeated introduction of the plant via fragments transported by boat trailers from infested lakes.

Lake associations and water utilities in Indiana spend an estimated $803,041 each year for aquatic plant control in Indiana lakes. Reward and 2,4-D constituted over 60 percent of the cost of chemicals with over 60,000 pounds of 2,4-D indicated on permit applications. Based on the surface area of lakes where presence of Eurasian watermilfoil was reported and current application rates, the annual demand for nuisance plant control in Indiana lakes could be over $1,224,000. This number may be a very conservative estimate of the actual cost of controlling exotic plants that interfere with recreation and drinking water supplies and does not include state resources spent on treating plants on state-owned properties or treatment of private lakes where no permit is required.

Biological control of weeds can provide long-term control that only affects target plants without harming beneficial plants. Once established, biological controls can be self-maintaining, reducing the need for repeated treatments. Applications to lakes in Minnesota, Vermont, Illinois, and Ohio show that a native weevil (*Euhrychiopsis lecontei*) actually prefers the exotic species of milfoil over the native milfoil and has provided a successful means of milfoil control. The weevil lays its eggs on the tips of the milfoil plant. When the young hatch, they burrow down the stem, eating their way through the plant and slowing plant growth or shearing the top of the plant below the water surface. The weevil occurs in Minnesota, Wisconsin, and Illinois, and was discovered in northern Indiana at Saugany Lake, Laporte County, in 1997. Several lakes in Indiana have hired the application of weevils, but results have not been reported.

Purple loosestrife: Purple loosestrife, known for its beautiful purple flowers and landscape value, is a wetland plant from Europe and Asia that was introduced to the east coast of North America in the 1800s. It has become a serious pest to native wetland communities where it out-competes native plants. Purple loosestrife invades marshes and lakeshores, replacing cattails and other wetland plants. This nonindigenous plant is unsuitable to meet habitat needs such as cover, food or nesting sites for a wide range of native wetland animals including ducks, geese, rails, bitterns, muskrats, frogs, toads and turtles. Each year, more than a million acres of wetlands in the U.S. are taken over by this plant. To control the spread of purple loosestrife, a state law was enacted on July 1, 1996, that prohibits the sale of all forms of purple loosestrife (any variety, species, horticultural variety, cultivar), or other members of the genus *Lythrum*, whether reportedly sterile or not. The Department of Natural Resources has also been releasing insects to control purple loosestrife where it has invaded wetlands. Releasing the insects that control loosestrife in Europe can bring it under control. At a typical site, the amount of purple loosestrife around the boat ramp at Pleasant Lake in St. Joseph County

decreased dramatically only one year after releasing the insects in July 1998.

Reed canary grass: Reed canary grass is a cool-season, sod-forming, perennial wetland grass native to temperate regions of Europe, Asia, and North America (Wisconsin DNR, undated). The Eurasian ecotype has been selected for its vigor and has been planted throughout the U.S. since the 1800's for forage and erosion control. It has become naturalized in much of the northern half of the U.S., and is still being planted on steep slopes and banks of ponds and created wetlands. Invasion is associated with disturbances including ditching of wetlands, stream channelization, deforestation of swamp forests, sedimentation, and intentional planting. Over time, it forms large, monotypic stands that harbor few other plant species and are subsequently of little use to wildlife. Once established, reed canary grass dominates an area by building up a tremendous seed bank that can eventually erupt, germinate, and recolonize treated sites. Once established, reed canary grass is difficult to eradicate without removing other beneficial plants.

Which programs are engaged in management of invasive species?

Numerous aquatic nuisance species have been introduced and dispersed in the Great Lakes, Mississippi River basin, and associated inland waters of the state by various pathways. The environmental and socio-economic costs resulting from ANS infestations will only continue to rise with further ANS introductions. Although an awareness of the problems caused by aquatic nuisance species is emerging, the solutions are not readily apparent. This comprehensive state management plan for nonindigenous aquatic nuisance species provides guidance for management actions to address the prevention, control and impacts of aquatic nuisance species that have invaded or may invade the Great Lakes region and inland state waters. State programs are described here and other related regional or federal programs are described in Appendix C.

INDR Division of Entomology and Plant Pathology (DEP)

The Division of Entomology and Plant Pathology manages plant and apiary pests for the preservation and protection of cultivated and natural resources, to facilitate trade, and to enhance the quality and appreciation of the environment. The division inspects and certifies 4,000 licensed dealers and 500 plant nursery facilities in Indiana to protect state resources from pests and pathogens (Robert Waltz, DEP, pers. comm., July 29, 2003). They work with federal agencies such as the U.S. Department of Agriculture's Animal and Plant Health Inspection System (APHIS), the North American Plant Protection Organizations's Phytosanitary Alert System, and other organizations to identify and track diseases, conduct surveys, inspect shipments and nursery stock, and eradicate or control species on the list of federal noxious weeds. Some aquatic plants on this list include hydrilla (*Hydrilla verticillata*), Chinese waterspinach (*Ipomoea aquatica*), giant salvinia (*Salvinia auriculata*), and anchored water hyacinth (*Eichhornia azurea*). Alerted by the public and a district fisheries biologist, the division has taken action to eradicate a population of water hyacinth found in a southern Indiana pond.

IDNR Division of Fish and Wildlife

The Division of Fish and Wildlife is charged with the management and protection of fish, game, and nongame animals in the state of Indiana. The Fisheries Section spends a total of about $1.5 million per year on projects or programs related to exotic species. Regulatory programs address the use of fish and wildlife through permitting by imposing disease-monitoring requirements on imported fish and controlling use of high-risk exotic species that are not legal for possession without a permit. Most of the $750,000 Lake Michigan program is oriented to exotic species management (Randy Lang, DFW, pers. comm., August 12, 2003). The division additionally supports a one-quarter million dollar monitoring project on yellow perch, a species that may be in peril partially due to interactions with exotics such as zebra mussels and round gobies in Lake Michigan. Additionally, division biologists conduct surveys of fish and wildlife including the identification and control of exotic species in certain circumstances. Exotic species management on inland lakes could conservatively cost another $250,000 per year. Surveying and controlling exotic species on streams can amount to an additional $100,000 to $200,000 annually. In more extreme cases, the district fisheries biologists periodically use chemicals to eradicate fish where the fishery is irreversibly damaged by invasive species, such as gizzard shad or carp, and then restock the water with game and occasionally nongame fish species. Most of the predatory fish stockings are aimed at making the best use of ANS forage bases or to replace native species lost because of ANS. The hatchery and fish management annual grant agreements run about two million dollars each for a total of four million. Approximately half of that, or $2 million, is a direct result of managing against or around the impacts of ANS on recreational and commercial fisheries in Indiana (Tom Flatt, DFW, pers. comm., August 12, 2003). Fish and wildlife biologists, working with private land owners, have enrolled 2,500 acres in the wildlife habitat improvement program, 78,000 acres in the classified wildlife habitat program, and 1,500 acres in the wildlife habitat cost-share program. Much of the stability of these areas depends upon active management and resistance to invasion by nuisance species.

IDNR Division of Law Enforcement

Conservation officers are trained in the detection and identification of exotic species that are illegal for possession, as well as

inspection of facilities that are permitted for use of certain controlled fish or other aquatic wildlife, and investigation of fish and wildlife damages caused by pollution. Information on preventing the spread of zebra mussels and other invasive species is included in Boater Education courses administered by the division.

IDNR Lake and River Enhancement program (LARE)

The Division of Soil Conservation's Lake and River Enhancement Program (LARE) was developed to ensure the continued viability of public-access lakes and streams. The program's goal is to utilize a watershed approach to reduce nonpoint source sediment and nutrient pollution of Indiana's and adjacent states' surface waters to a level that meets or surpasses state water quality standards. The program funds aquatic plant management plans for lakes. In 1999, the State Soil Conservation Board (SSCB) approved grants of up to $92,816 in supplemental funding as a 25 percent cost-share to fund nuisance plant control at 17 lakes in northern Indiana and provided up to $43,650 to fund a demonstration project using milfoil weevils in two lakes in northern Indiana and a reservoir in southern Indiana. In the same year, staff from the Purdue University Pesticide Programs and the Division co-authored a 19-page brochure to inform lake associations and others about treatment methods and land use management to prevent overabundant aquatic plant growth. Continued interest in state funding for nuisance aquatic plant control resulted in the state legislature approving doubling of LARE fees associated with boat registration for additional funding of these activities, raising about $700,000 per year for control of exotic species in state waters (Jim Ray, LARE, pers. comm., July 29, 2003).

IDNR Division of Nature Preserves (DNP)

Indiana's system of Nature Preserves was established by a 1967 act of the General Assembly. The system's purpose is to provide permanent protection for significant natural areas within the state. A natural area is an area of land and/or water that has retained or re-established its natural character, or has unusual flora or fauna, or has biotic, geological, scenic or paleontological features of scientific or educational value. Nature Preserves are actually living museums, natural resources that contain a record of Indiana's original natural character. Like other museums, they serve as a valuable record for scientific study and increase understanding of the natural and historical heritage of the state. Natural areas can become dedicated nature preserves only with the agreement of the landowner, the Department of Natural Resources, the Natural Resources Commission, and the Governor. Once a preserve is dedicated, it is protected in perpetuity from development that would harm its natural character. Unfortunately, it may continue to be difficult and costly to protect dedicated nature preserves from invasion by exotic species. The Division is charged with insuring that the natural qualities of preserves are protected. This may include prescribed burning, removing non-native plants, or other management provided for in the Master Plan, and maintaining boundaries and trails. The IDNR Division of Nature Preserves provides technical support costing $27,438 for the volunteer biocontrol project for distribution of purple loosestrife beetles, has spent $51,787 on contract work and $20,000 on seasonal labor per year for control of invasive species (e.g., *Rhamnus, Phragmites, Lythrum)* in nature preserves, and assists with publication and distribution of brochures on encouraging the use of native species in landscapes rather than exotics in both private and public lands (John Bacone, DNP, pers. comm., August 6, 2003). The Division is also actively involved in inventorying the state for previously unknown natural areas and has information on the distribution of a number of exotic species.

Indiana Department of Transportation (InDOT)

Permits associated with road construction require the InDOT to monitor and maintain mitigation wetlands for five years after construction. They spend approximately $2,500 to $5,000 per acre to control invasive species in these wetlands (Rick Phillabaum, InDOT, pers. comm., July 29, 2003). The agency expends staff resources to explore more effective tools for invasive species control in wetlands and disturbed sites, especially for control of purple loosestrife, common reed, and aggressive native species such as cattails, until adequate native diversity is establish in the mitigation wetland.

Indiana State Office, Natural Resources Conservation Service (NRCS)

The NRCS provides technical information and financial assistance regarding impacts and control of exotic species on agricultural lands. The office produced a publication on wetlands and West Nile Virus (NRCS, 2003). The Wildlife Habitat Incentives Program (WHIP) is a voluntary program for people who want to develop and improve wildlife habitat primarily on private land. Through WHIP USDA's Natural Resources Conservation Service provides both technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat. WHIP agreements between NRCS and the participant generally last from 5 to 10 years from the date the agreement is signed. The WHIP program provides funds for control of exotic species on land and waters dedicated to management for wildlife habitat. The NRCS spends an estimated $3,000 to $5,000 per year on control of reed canary grass along wetlands, drainage ways, and riparian areas (Dave Stratman, NRCS, pers. comm., July 29, 2003).

State Health and Environment Officials (ISDH, IDEM, OISC, BOAH, ADDL)

Several state health agencies become involved in situations where parasites or pathogens of humans or domestic livestock are

introduced into the state. Epidemiologists at the Indiana State Department of Health (ISDH) assist with diagnosis, tracking, and public information on diseases. They have most recently been involved in the introduction of exotic diseases such as monkey pox, West Nile Virus, Chronic Wasting Disease (CWD), and health warnings associated with the discovery of toxin-producing bluegreen algae. Drinking water utilities are regulated by the Indiana Department of Environmental Management (IDEM) which issues permits that may monitoring and filtration of toxins produced by introduced algae in public source water. The Office of the Indiana State Chemist (OISC) reviews and registers pesticide products that might be needed for control efforts in Indiana, and incorporates specific invasive pest species materials into their pesticide applicator training materials and certification exams. The State Board of Animal Health (BOAH) promotes and encourages the prevention, suppression, control and eradication of infectious, contagious and communicable diseases affecting the health of domestic or wild animals within Indiana and trade in animals and animal products in and from Indiana. Animals suspected of infection are examined and tested by specialized veterinarians at the Animal Disease Diagnostic Laboratory (ADDL) at Purdue University. Introduced diseases for which the ADDL has tested have included largemouth bass virus, spring viremia of carp, and several diseases of trout and salmon. Researchers at the Southern Indiana-Purdue Agricultural Center (SIPAC) in Dubois County have a history of intense research in production and utilization of forages and agronomic crops, management of beef and dairy cattle, and catfish production. The Southern Indiana Disease Diagnostic Laboratory serves the agricultural industry in this part of the state.

Aquatic management and plant control companies

The DNR Division of Fish and Wildlife provides a complementary list of 18 companies in Indiana that provide lake management and plant control services. There are 34 companies listed as commercial fish suppliers, which sell to private property owners. Invasive plant control and renovation of fisheries on private waters due to ANS infestation can amount to 50 to 80 percent of company income (Scott Shuler, Aquatic Control, pers. comm., July 29, 2003). Estimates for the statewide industry are unknown.

Invasive Plant Species Assessment Working Group (IPSAWG)

Many Indiana agencies and organizations have joined together to form the Invasive Plant Species Assessment Working Group (IPSAWG). The goal of the group is to assess which terrestrial and aquatic plant species may threaten natural areas in Indiana. Through the assessment, recommendations will be developed for specific plant species concerning their recommendation, sale, and planting within the state. While the focus of the effort so far has been terrestrial, aquatic plants will also be evaluated as appropriate. The IPSAWG's goal is that all partner agencies and organizations would utilize the species assessment when recommending or selling plants.

University of Notre Dame

Researchers at the University of Notre Dame are developing risk assessments for freshwater taxa that will allow the prediction of likely invasive species in the Great Lakes region. Once these species are identified, efforts can be made to keep them out of Indiana. A risk assessment protocol for fishes in the Great Lakes has been completed, and similar analyses for molluscs and aquatic plants are underway. With these tools, it is possible for regulators to assess species before they arrive and determine whether it is in the best interests of the state for them to be allowed. Risk assessments can be applied to organisms that may be introduced intentionally (e.g. aquarium and watergarden trades) or unintentionally (e.g. ballast). In future work, risk assessments already formulated will be refined, and risk assessments will be developed for additional taxa.

The Nature Conservancy, Indiana Chapter

Together with our members and conservation partners, the Indiana Chapter of The Nature Conservancy has protected over 43,000 acres of irreplaceable forest, wetland and prairie habitats in the state. The chapter works with the IDNR Division of Nature Preserves to prevent and control the invasion of exotic species in these areas, spending an estimated $30,000 annually in salary and material costs along with an additional $5,000 annually to develop site conservation plans (Ellen Jacquart, pers. comm., August 27, 2003). They also support a statewide biocontrol project using beetles that feed on purple loosestrife. The chapter assisted with development of the brochure *Landscaping with Plants Native to Indiana: Recommended Plants and Their Sources*, which encourages individuals and landscapers to use native species rather than invasive species in both terrestrial and aquatic settings.

Indiana Lakes Management Society (ILMS)

The ILMS promotes and encourages the understanding and comprehensive management of lakes and reservoirs and their watershed ecosystems. Indiana is blessed with over 500 natural (glacial) lakes greater than 5 acres in area. These are located primarily in the three northernmost tiers of counties. Besides the natural lakes, there are 25 public reservoirs larger than 300 acres. In addition, the state contains at least 10,000 artificial ponds of various sizes. Total area of lake habitat in Indiana is estimated to be almost 300,000 acres. The southern tip of Lake Michigan makes up about half this amount. All together, a little more than 1% of Indiana's total area is composed of "lake water." Approximately 120 lake associations provide information on issues of concern to residents around

private and public lakes in Indiana. For instance, the 15 lake associations working within the Tippecanoe Environmental Lake and Watershed Foundation (TELWF) and over 120 lake associations involved with the ILMS have raised private funds for aquatic plant herbicide control and biocontrol demonstration projects, as well as distributing 5,000 newsletters each quarter and answering about 100 visits and calls each week with information on permits and other ANS issues (Lynn Stevens, TELWF and ILMS, pers. comm., July 29, 2003). The cost of these services, if provided by a private sector contractor, would amount to approximately $30,550 annually.

Indiana Native Plant and Wildlflower Society (INPAWS)

The INPAWS promotes the appreciation, preservation, conservation, utilization and scientific study of the flora native to Indiana and to educate the public about the values, beauty, diversity and environmental importance of indigenous vegetation. Together with the Indiana Chapter of The Nature Conservancy and IDNR Division of Nature Preserves, they sponsored development of brochures on exotic and native plant species for landscape use. They also organize and host volunteer control efforts to remove invasive species from nature preserves. Other statewide aquatic gardening societies also provide information to property owners and retailers that address invasive species concerns.

Indiana-Illinois Sea Grant

The Indiana-Illinois Sea Grant offices are located on the campuses of the University of Illinois and Purdue University. Sea Grant produces a number of outreach materials on exotic species, including a CD-ROM with a compendium of brochures and other information, exotic species advisory signs that are posted at public access sites and boat ramps throughout Indiana, "Don't Dump Bait" stickers and informative signs for bait shops, zebra mussel citizen monitoring kits, videos, and posters.

Indiana Lake Michigan Coastal Zone Management

The purpose of the Indiana Lake Michigan Coastal Program is to enhance the State's role in planning for and managing natural and cultural resources in the coastal region and to support partnerships between federal, state and local agencies and organizations. The Indiana Lake Michigan Coastal Program relies upon existing laws and programs as the basis for achieving its purpose. Indiana's most challenging coastal issues include public access to the shore, beach closures, water quality, brownfields dredging, shoreline erosion, and preservation of natural areas. Coastal industries are significant to Indiana's economy. The Lake Michigan shore is home to the fifth largest oil refinery in the world, 25% of the nation's steel production, and the busiest port in the Great Lakes (Port of Indiana, 1994). Tourism and recreation are also important, especially in the extensive Indiana Dunes State and National Lakeshore. In 2003, Indiana received $1.171 million as the state's share of the federal Coastal Zone Management Program funds for projects to protect and restore natural resources in Indiana's Lake Michigan coastal region. Approximately $975,000 of this funding is being used as for the Indiana Coastal Grants program and is available to local entities for projects meeting the program criteria. The program can provide funds for exotic species management in this region.

Circle City Aquarium Club, Indianapolis, Indiana

Established in Indianapolis in 1991, the Circle City Aquarium Club promotes a higher educational level of the aquarium hobby to the membership and public at large; stimulates an interest in the hobby; increases knowledge of environmental concerns related to the hobby and means of affecting those concerns; and develops social friendships of the members. They have monthly meetings, host a chat room, feature speakers, and produce a newsletter for members that could include information on the risks of releasing fish to public waters or on other ANS issues. An officer of the aquarium club participated in development of the state ANS management plan.

Other programs

A number of other programs include an invasive species outreach or funding component. The Indiana Commissioner of Agriculture's office supports control of disease and weeds that affect agriculture. Purdue University is initiating a new curriculum on invasive species, based on the efforts of Dr. Carol Lembi on aquatic plants and Dr. Steve Yaninek on aquatic insects. The Illinois-Indiana regional chapter of the North American Native Fishes Association (NANFA) supports appreciation for and use of native fishes rather than exotics in the aquarium and pet trade. The Indiana Karst Conservancy is exploring the impact of ANS on dedicated nature preserves and other karst areas with ground water sources (Kriste Lindberg, IKC, pers. comm., July 29, 2003). The Sierra Club in Indiana is increasingly involved in outreach to members on these issues (John Ulmer, Sierra Club, pers. comm., July 29, 2003). The City of Bloomington parks department has participated in state cost-share biocontrol projects using weevils on Eurasian watermilfoil, funded plant control, and contracted for plant surveys to detect problematic invaders (Steve Cotter, City of Bloomington, pers. comm., July 29, 2003). In 2003, the International Association of Fish and Wildlife Agencies (IAFWA) funded a multiyear project to facilitate communication on ANS issues between state fish and wildlife agencies in each region of the nation and supporting a pilot state communication project that will provide the agencies with model plans for public outreach on ANS issues.

What regulatory authorities control management of exotic species?

The prevention and control of aquatic nuisance species have global implications that require policies and programs at various levels of government. The federal Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (Public Law 101-646, also known as NANPCA) delineates the basic role of federal, regional and state government in the implementation of the act. The NANPCA provides a foundation for the implementation of state plans.

Federal Role

The NANPCA is the federal legislation which calls upon each state to develop and implement a comprehensive state management plan for the prevention and control of aquatic nuisance species. The act, established for the prevention and control of the unintentional introduction of nonindigenous aquatic nuisance species, is based on the following five objectives as listed in Section 1002 of NANPCA:

- to prevent further unintentional introductions of nonindigenous aquatic nuisance species;
- to coordinate federally funded research, control efforts and information dissemination;
- to develop and carry out environmentally sound control methods to prevent, monitor and control unintentional introductions;
- to understand and minimize economic and ecological damage; and to establish a program of research and technology development to assist state governments.

The NANPCA was primarily created in response to the zebra mussel invasion of the Great Lakes, where this ballast water introduction has caused serious ecological and socio-economic impacts. Although the zebra mussel invasion of the Great Lakes has played a central role in prompting passage of the federal legislation, NANPCA has been established to prevent the occurrence of new ANS introductions and to limit the dispersal of aquatic nuisance species already in U.S. waters.

The national Aquatic Nuisance Species (ANS) Task Force, co-chaired by the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration, was established under Section 1201 of NANPCA to coordinate governmental efforts related to nonindigenous aquatic nuisance species in the United States with those of the private sector and other North American interests. An important role of this federal group in the implementation of NANPCA is to facilitate national policy direction in support of the act. The ANS Task Force (consisting of seven federal agency representatives and eight ex officio members representing nonfederal governmental entities) has adopted the Aquatic Nuisance Species Program under Section 1202 of the act which recommends the following essential elements:

Prevention: Establish a systematic risk identification, assessment and management process to identify and modify pathways by which nonindigenous aquatic nuisance species spread.

Detection and Monitoring: Create a National Nonindigenous Aquatic Nuisance Species Information Center to coordinate efforts to detect the presence and monitor the distributional changes of all nonindigenous aquatic nuisance species, to identify and monitor native species and other effects, and to serve as a repository for that information.

Control: The Task Force or any other potentially affected entity may recommend initiation of a nonindigenous aquatic nuisance species control program. If the Task Force determines, using a decision process outlined in the control program, that the species is a nuisance and control is feasible, cost effective and environmentally sound, a control program may be approved.

The ANS Task Force recommends research, education and technical assistance, and rapid response planning as strategies to support the elements listed above.

The ANS Task Force also provides national policy direction as a result of protocols and guidance that have been developed through the efforts of the following working committees: Research Protocol/Coordination Committee, Intentional Introduction Policy Review Committee, Great Lakes Panel on Aquatic Nuisance Species, Ruffe Control Committee, Risk Assessment and Management Committee, Detection and Monitoring Committee, Zebra Mussel Coordination Committee and the Brown Tree Snake Control Committee.

One role of the federal government in the prevention of unintentional introductions of aquatic nuisance species is defined under Section 1101 of NANPCA, which mandates the establishment of regulations for ballast water management aimed at limiting introductions through transoceanic shipping. U.S. regulations control the discharge of ballast from all vessels entering Great Lakes

waters, thus far the only region in the United States to be regulated. The regulations have been enforced by the U.S. Coast Guard since May 1993, with active assistance from the Canadian Coast Guard and Seaway authorities. (The Canadian federal government has yet to enact federal ballast water management regulations; voluntary guidelines are in place.) The need has been identified for a federal research program to develop innovative technology for ballast water management.

The U.S. Fish and Wildlife Service administers the Lacy Act, which prohibits importation and interstate delivery of listed species. The list of injurious live or dead fish, mollusks, crustaceans, or their eggs (50 CFR 16.13) include the following aquatic nuisance species:

- walking catfish, family Clariidae
- mitten crabs, genus *Eriocheir*
- zebra mussels, *Dreissena polymorpha*
- live or dead uneviscerated salmonid fish, live fertilized eggs, or gametes of salmonids are prohibited unless accompanied by a certification that the ensures they are free of *Oncorhynchus masou* virus and the viruses causing viral hemorrhagic septicemia and infectious hematopoietic necrosis, and meet the conditions in 50 CFR 16.13
- Any live fish or viable eggs of snakehead fishes of the genera *Channa* and *Parachanna* (or their generic synonyms of *Bostrychoides*, *Ophicephalus*, *Ophiocephalus*, and *Parophiocephalus*) of the Family Channidae.

The U.S. Department of Agriculture also regulates the importation and interstate transport of aquatic pests and pathogens that can have a negative impact on crop production, horticulture, silviculture, and aquaculture. The federal noxious weed list has authority through the Plant Protection Act (Title IV) of the P.L. 106-224 (2000). Included in the list are 19 aquatic or wetland species as of September 8, 2000. These species include mosquito fern (*Azolla pinnata*), anchored water hyacinth (*Eichhornia azurea*), and hydrilla (*Hydrilla verticillata*).

Application of pesticides for control of exotic species must be conducted under FIFRA, the Federal Insecticide, Fungicide, and Rodenticide Act. In response to the Talent Decision in the 9th Circuit Court and ensuing actions, G. Tracy Mehan, III, Assistant Administrator for Water, and Stephen Johnson, Assistant Administrator for Prevention, Pesticides and Toxic Substances, signed a memorandum on July 11, 2003, that provides interim guidance on whether certain pesticide uses may legally occur without issuance of a permit under the National Pollution Discharge Elimination System (NPDES) of the Clean Water Act. The Interim Guidance states that the application of a pesticide to waters of the United States consistent with relevant requirements of Federal Insecticide, Fungicide, and Rotencide Act (FIFRA) does not constitute the discharge of a pollutant that requires a NPDES permit in the following circumstances: (1) the application of pesticides is directly to waters of the United States in order to control pests (for example mosquito larvae or aquatic weeds that are present in the water) and (2) the application of pesticides is to control pests that are present over waters of the United States that result in a portion of the pesticide being deposited to water bodies (for example when insecticides are aerially applied to a forest canopy where water may be present below the canopy or when insecticides are applied for control of adult mosquitoes). EPA will solicit comments on this interim statement and guidance through the Federal Register prior to determining a final Agency position.

On July 11, 2003, G. Tracy Mehan, III, Assistant Administrator for Water, and Stephen Johnson, Assistant Administrator for Prevention, Pesticides and Toxic Substances, also signed a "Charge to the NPDES/Pesticides Work Group" that directed an EPA workgroup to compare the risk management/risk mitigation measures that have been adopted as a result of the Federal Insecticide, Fungicide, and Rotendicide Act (FIFRA) label relative to actions that would be required as a result of an NPDES permit. The workgroup was also directed to identify any recommendations that could be made under either FIFRA/FQPA (Food Quality Protection Act) or Clean Water Act (CWA) that would assist in better coordination, integration and increased efficiencies between the programs and continued protection of the aquatic environment. For example, these could include modifications that could be made in the pesticide registration process or changes in the approach to risk management under the CWA and/or FIFRA.

Regional Role

Two major basins incorporate waters of the state of Indiana—the Mississippi River, including the Ohio and Wabash River drainages, and the Great Lakes, including the St. Joseph and other rivers draining to Lake Michigan in the northwest and with a smaller portion of the northeastern part of the state draining to Lake Erie. Fisheries related activities in the Ohio and Mississippi River basins have been regionally coordinated by two organizations—the Mississippi Interstate Cooperative Resource Association (MICRA), established in 1991, and Ohio River Valley Water Sanitation Commission (ORSANCO), established in 1948. The Ohio River Fish Management Team (ORFMT) is a multi-state effort to collaborate on research and regulations along the length of the Ohio River system. The Great Lakes ANS Panel provided early leadership for developing state ANS management plans, including model guidance on invasive species regulations. Although none of these organizations has direct regulatory authority within Indiana, they

all have been instrumental in generating discussion between states in the respective regions regarding common regulatory interests and concerns. Indiana has had one or more state agency representatives participating in activities of these two groups over the past decade.

State Role

The comprehensive state management plans for aquatic nuisance species are addressed in Section 1204 of NANPCA. Section 1204 requires that the management plan "identifies those areas or activities within the state, other than those related to public facilities, for which technical and financial assistance is needed to eliminate or reduce the environmental, public health and safety risks associated with aquatic nuisance species." The content of each state plan is to focus on the identification of feasible, cost-effective management practices and measures to be pursued by state and local programs to prevent and control aquatic nuisance species infestations in a manner that is environmentally sound. As part of the plan, federal activities are to be identified for prevention and control measures, including direction on how these activities should be coordinated with state and local efforts. Section 1204 also states that in the development and implementation of the management plan, the state needs to involve appropriate local, state and regional entities, as well as public and private organizations that have expertise in ANS prevention and control.

The state management plans are to be submitted to the national ANS Task Force for approval. If the plan meets the requirements of the ANS Task Force, the plan becomes eligible for federal cost-share support. If not, the plan is returned to the state with recommended modifications. Plans may be implemented with other funds supplied by state and cooperative agencies. Further details on the state management plans can be found in Section 1204 of the act.

Regulations in many states were initially designed to address particularly high risk species and activities for which species are imported and sold. Other nuisance or exotic species are addressed within the context of pests or pathogens that affect agricultural crops or aquaculture production. An annotated listing of all Indiana regulations pertaining to prevention and control of aquatic nuisance species is provided in the Appendix E.

Designing an integrated, comprehensive regulatory approach:
Issues for further examination

As invasive exotic species and global trade introduce more pervasive problems, a more integrated and comprehensive approach to state, regional, and federal authority will be needed to avert the economic and aesthetic changes that could occur. Invasive species and exotic pests and pathogens may be transported together, indicating a need for consistent and coordinated jurisdiction across all nuisance species. A comprehensive approach may consist of either: (1) modification of a number of existing definitions and authorities in state statutes and administrative rules to include additional invasive species; or (2) development of a state statute to specifically provide for addition and modification of sections of code addressing all invasive species, similar to Minnesota Chapter 84D on Harmful Exotic Species and based on the Great Lakes ANS Panel model statute recommendations.

Some of issue areas that may require additional examination are described below. Significant contributions to this analysis were derived from *Analysis of Laws & Policies Concerning Exotic Invasions of the Great Lakes: A Report Commissioned by the Office of the Great Lakes, Michigan Department of Environmental Quality* by Eric Reeves, March 15, 1999.

Definition and classification of invasive exotics: Adequate regulatory authority is based on clear and defensible definitions that classify the characteristics of plants and animals considered by an invasive species program. Regulatory authority could address species that are both invasive and exotic (nonnative). They may need to distinguish between exotic and naturalized nonnative species (i.e., species that have been present in Indiana for so long or are so widely distributed that control measures would be ineffective). Certain invasive species may be regulated as a pest in a particular area, even if the species is widespread in other parts of the state. Exotic species may not be invasive or harmful. Regulation of benign exotics would be an inefficient use of authority. In contrast, there are also native species that are invasive nuisances in situations where the area has been disturbed or is being managed for a particular purpose. Therefore, most regulatory authorities are often built on the concept of "harmful exotics".

Examples of terms that may require definition are: nuisance, invasive, harmful exotic, incapable of perpetuation, confined for research, indigenous, and naturalized species are not specifically defined in state law or administrative code. Worms (i.e., annelids, oligochaetes, trematodes, cestodes, planarians), lower invertebrates and microorganisms that can be pests or pathogens of fish and wildlife are not included in either the plant pest lists, licensing of bait dealers or wild animal importation permits. A specific statute regulates the control of nuisance aquatic plants, including exotic and native species in public waters. Exotic species that have a negative impact on other types of commercial facilities or animals that affect recreational uses of water, such as clogging of intake

pipes by zebra mussels, are not directly defined or regulated as pests in state law. Release of organic or inorganic matter that pollutes aquatic communities and limits uses of water is prohibited under state water pollution control laws in IC 13-18-4. Effluents from certain fish hatchery systems are required to have a National Pollution Discharge Elimination System (NPDES) permit. However, exotic species in these effluents are not generally monitored or prosecuted. In comparison, the Pennsylvania law specifies that discharges be "rendered incapable of containing self-perpetuating living organisms…." (Pennsylvania Consolidated Statutes, 3PCS Sect 4219.c). Several states, including Minnesota, Wisconsin, and New York have specifically included "biological materials" as a form of pollution under state pollution control laws. However, it is not clear whether release of exotic plants, animals, microorganisms, or viable genetic material falls within the jurisdiction of state pollution control laws in Indiana, as indicated by a recent inquiry about regulation of "bacterial remediation" in public lakes. A procedure for classifying exotic species by using a designated criteria or a risk assessment method could institute consistency, predictability, and responsibility for justifying risk management decisions and authorities.

Jurisdiction: As with other exotic species issues, consistency between states where trade occurs regularly or where watersheds overlap jurisdictions is essential for effective control. Ability to enter into cooperative agreements and powers of quarantine to manage pests and pathogens, as currently defined in state law, may need to be extended to address other aquatic nuisance species and terrestrial invasive species. The department would need the ability to respond to an introduction by protecting a particular uninfested area or waters that are particularly sensitive to exotics. For instance, specific policies may need to be developed to address management and release of invasive species on state properties. The impacts of invasive species may be different for sensitive properties that are maintained by the state for particular reasons (e.g., nature preserves, recreational fisheries), requiring more specific regulations than the rules that cover general use statewide. Agencies may need to review their policies through an intradepartmental oversight mechanism to ensure that different division policies and actions regarding invasive species are not contrary to each other within the same agency.

Interjurisdictional issues and interstate commerce laws: Prevention and control of invasive aquatic species may require careful evaluation and effective use of interjurisdictional authorities. Although management of invasive species by waterway or watershed makes sense ecologically, watersheds are not a legal entity. However, regulations within a state may overlay the counties on the watershed and designate a portion of the county that nearly matches watershed boundaries. State laws are constrained by federal interstate commerce laws. Regulations may need to clarify or extend control of interstate shipments by stating that animals must not be unloaded or leave the control of a common carrier. A mechanism for interstate agreements to regulate fish and game management on boundary waters is available in IC 14-22-10-9. Extension of this authority to include agreements regarding invasive species that move along waterways that cross state lines may be beneficial. Authority in IC 14-24-2-2 to enter into agreements with the federal government or other states for the purpose of controlling pests and pathogens of plants and bees should possibly be extended to cover management of invasive species.

Under IC 14-22-34-14, the department may enter into agreements with federal agencies, political subdivisions or private individuals for the purpose of managing an area used by endangered species, possibly including removal of invasive species that threaten habitat used by the protected species. The ability to prohibit the importation of an animal from an area with an epidemic disease under IC 15-2.1-18 could be extended to importation of aquatic animals from waters known to contain particularly harmful invasive species. Relationships between state agencies, such as the Department of Commerce, Board of Animal Health, Office of the State Chemist, Office of the Commissioner of Agriculture, Department of Health, Department of Environmental Management, and Department of Natural Resources may need to be better integrated to effectively and efficiently address invasive species and their impacts on wild and domestic aquatic organisms.

Invasive species council: The Department of Natural Resources is working with other state agencies and representatives to explore the needs and development of a state invasive species council to coordinate a number of programs that address management of aquatic and terrestrial invasive species. The Division of Fish and Wildlife is funding a facilitator to develop an Indiana State Aquatic Nuisance Species (ANS) Management Plan for approval by the ANS Task Force. However, there is no legislatively created council or program to guide and coordinate overall management of aquatic or terrestrial invasive species. Continuation of the ANS Advisory Council, as an outgrowth of the ANS Plan Work Group, would facilitate further implementation of the plan and provide a pilot process for the larger council.

Enforcement: Additional funding for patrols and training of law enforcement officers in detection of nuisance species may be essential to ensure that well-designed regulatory authority can be implemented. Due to the extreme cost associated with the remediation of damage caused by exotic species, if remediation is even possible, fines must be commensurate with potential damages. Civil penalties associated with misdemeanors are low (up to $500 for unlicensed possession of a prohibited species)

indicating that the fines are not intended as a major deterrent for major commercial ventures such as aquaculture, the pet trade or commercial shipping. No criminal penalties exist for the violations. Existing authorities to assess and recover costs related to civil liability resulting in wildlife damage assessments under IC 14-22-10-6 may be construed or extended to cover death of fish or game resulting from negligent or intentional release of nuisance exotic species. Clarity may be needed to ensure that definitions of jurisdictional (e.g., "public" or "private") waters adequately address risks to public and commercial resources.

Approved and illegal species lists: Regulations also include several sets of species that are prohibited for importation, possession or sale for any use, as well as a list of approved fish species for sale for release under permits. These lists were developed as the department becomes aware of individual species that are known to pose a serious risk to natural and commercial resources in Indiana. The department has not undertaken a comprehensive risk assessment to proactively identify species for these lists.

Risk assessments that describe the level of threat associated with the life history characteristics, probability of introduction and establishment, and use or containment of the species could be a standard science-based procedure for permitting authorities. Risk assessments must be driven by the best available data and refereed science, not just expert opinion, anecdotal data, or unpublished scientific data without adequate peer review. Use of a published decision support tool creates a process that can be replicated, periodically evaluated and updated, and defended both legally and publicly.

Determining the level of risk for particular species may be very complex. Risk posed by some species may be difficult to assess due to a lack of scientific information on the life history, invasive character or adaptability of the species. Some states use the concept of a "clean list" that identifies allowable species and places the burden of proof on the applicant for species posing unknown levels of risk. Some states, such as Pennsylvania, broadly exempt tropical or saltwater fish under the assumption that these species will not survive winters in the fresh waters of the northern United States. Importers of colder water fish that may survive could be required to submit information on the ecological and economic risk of the species prior to approval for implementation under statutes addressing the sale of fish in Indiana. It is possible for an introduced species to be benign until it reaches a threshold level and then suddenly creates a nuisance for reasons that may or may not be understood. A significant lag time may exist from the time the invasive is recognized to the time when it attains critical mass and becomes problematic.

The effectiveness of illegal species lists in states that are joined by common waters or shared introduction pathways may be seriously compromised if they differ in which species they address. At a regional level, the Reeves' (1999) analysis suggests that it would be more effective to develop such lists for use in all Great Lakes basin states under the auspices of the Great Lakes Fishery Commission and the Great Lakes ANS Panel. Regional and national structures are in place for dealing with agricultural pests between state and federal jurisdictions. It may be necessary to develop or improve similar infrastructure for adequate enforcement regarding invasive species that have impacts on other natural and cultural resources.

Genetic modified organisms: Genetic engineering has become a tool for developing species with enhanced characteristics, such as faster growth or higher quality. State regulations have gradually incorporated references to use of genetically altered (or genetically modified) species, including biological control by release of sterile individuals. Some regulations have been extended to address importation of eggs, gametes or other genetically viable material. A risk analysis could be developed and implemented to determine acceptable use of biotechnology and genetic engineering in aquatic systems.

Pests and pathogens: Taxa that are controlled in the entomology and plant pathology code include arthropods, nematodes, microorganisms, fungus, parasitic plants, mollusks, plant diseases, or exotic weeds that are injurious to plants or bees. Pests or pathogens of fish or other wildlife are addressed in importation requirements of the fish and wildlife code. Most of the focus has been on diseases of fish. In cooperation with regional guidelines developed by the Great Lakes Fishery Commission in their *Great Lakes Fish Disease Control Policy and Model Program* (Hnath, 1993), the Division of Fish and Wildlife places conditions on permits for verifying and controlling the health status of all lots of stocked fish or fish sold for release with special emphasis on diseases of trout and salmon. Some states also provide for fish health certification requirements in administrative code or statute. Because discovery or introduction of new diseases can change quickly, regulations must be flexible enough to incorporate additional coverage.

Diseases of aquatic animals and water-borne pests and pathogens are addressed by several agencies in Indiana. Most of the legal structure regulating aquaculture facilities reside with the Department of Natural Resources. Aquaculture production is not represented on the state Board of Animal Health under IC 15-2.1-3-2. However, the state Animal Disease Diagnostic Laboratory (ADDL) at Purdue University has retained the services of aquatic veterinarians who provide assistance to state and private fish hatcheries. The ADDL has investigated diseases introduced into the state such as Largemouth Bass Virus (LMBv) and regularly conducts fish health inspections on shipments of trout and salmon. The state department of health has been involved in the

epidemiology of diseases transmitted by nuisance aquatic species, such as West Nile virus, water-borne diseases or toxin-producing organisms, such as cholera or the bluegree alga *Cylindrospermopsis*, and in diseases spread by terrestrial exotic pets, such as monkey pox. The commissioner of agriculture's office primarily provides assistance in markets and financing of aquaculture facilities. The Indiana Aquaculture Association has been somewhat variable in its strength as an organization for bridging agency policies and private aquaculture issues. As other species become increasingly common in aquaculture and production of aquatic organisms increases in Indiana, state capacity to assist aquatic production facilities and address additional invasive species and disease risks may need to be examined. The state of Michigan and several other states maintain aquaculture advisory committees that coordinate information transfer and policy recommendations. A similar body may be useful in Indiana.

Aquaculture and bait dealers: State regulations may not adequately address ANS risks associated with industries that are not specifically related to use of exotic fish in aquaculture production and sale for release. Because the regulations were developed within the fish and wildlife code, the primary concern was for reducing risks posed to natural resources by fish and other aquatic animals directly introduced into public waters. For this reason, most of the regulations cover only fish that are released or sold for release such as aquaculture, stocking, and use of bait in public waters. Property regulations may need to specifically address release of invasive species or vectors of disease on public property. Bait dealers licenses cover relatively few taxa (i.e.. "minnows" and crayfish) and do not address earthworms or other species that may be sold as bait. Approximately 500 bait dealers are licensed in the state by the DNR. No specific public education programs or requirements exist for record-keeping on sources and species or inspection of bait dealers to ensure that prohibited species or other harmful exotics are not introduced. Several species of fish on the "clean" list are exotic species that may have invasive tendencies (e.g., mosquitofish) and may merit reexamination and removal from that list. Some states have implemented policies and training in HACCP procedures to ensure that bait is checked for ANS. Although wild animal possession permits (312 IAC 9-11-2(e)) anticipate the possibility and require a plan for the quick and safe recovery of an escaped animal, aquaculture permits do not. At a regional level, the Reeves (1999) analysis suggests that it would be more effective to develop interagency agreements for inspection and certification of bait fish production ponds as a primary control point in the potential spread of ANS by that pathway.

Private aquaria, ornamental fish ponds, aquascapes, food fish, and pet trade: Under the assumption that fish purchased as pets or for food will not be released into outdoor waters, most of the regulations exempt food markets and the aquarium and pet trade. Public exhibits, such as zoos and aquariums, are also exempt from most permit requirements. Nurseries that sell aquatic plants and snails for backyard ponds are regulated to the extent that some species, such as purple loosestrife, are described or prohibited as plant pests or federal noxious weeds. Stocking of private ponds is only indirectly regulated by controlling the species which may be sold under a Haulers and Suppliers Permit or Aquaculture Permit. Most regulations exempt the aquarium and pet trade, sale of live fish for food, and other activities that may directly or indirectly spread nuisance exotics. Rules describing containment may need to be extended from aquaculture facilities and fish to other situations and species, especially for organisms held in backyard ponds, outdoor pens, having an external effluent, or in flood plains. Ironically, classifying certain pets as illegal without a permit, such as crocodilians over five feet in length or snakehead fish, may result in release of these specimens by pet owners who do not recognize an alternative means of dispossession. In response to heightened concern about introduction of Asian carp into Lake Michigan, the Chicago City Council passed a municipal ordinance banning any possession of these fishes without a permit and requiring retail food establishments to kill any live Asian carp before the fish is sold or provided to the customer (Title 7, Chapter 12 of the Municipal Code of Chicago, City Council Journal, April 9, 2003).

Education plays a key role in enforcement affecting private activities. There should be a link between the regulatory authorities, outreach organizations, and the public that encourages citizens to become a part of monitoring compliance and to take ownership in the impacts and control of invasive species.

Other pathways: Some states have regulations regarding additional pathways, such as recreational boating and transportation of aquatic recreation devices between waters. Existing authority over activities that aid in the spread of exotics (e.g., fragmentation by boat harvesters, habitat disturbance caused by shoreline construction) could include review and action to address impacts of the activity on risks related to exotic species. Ballast water regulations have not been proposed at the state level, but the department of natural resources has voiced political support for use of coordinated regional or federal regulations through comments on proposed federal legislation and participation in the Great Lakes ANS Panel.

Early detection and rapid response activities: Other activities related to aquatic nuisance species may be added to existing mandates for state agencies. These new program activities may include screening and monitoring for early detection of ANS introductions. State or regional authorities must be adequate to develop and implement rapid response activities. Recent incidents involving discovery of exotic toxin-producing cyanobacteria (blue-green algae) in public waters used for drinking and recreation

suggest that better communication and prior establishment of roles and relationships between state agencies regulating animal and human health may be warranted. The IDEM works with DNR and other agencies to respond to emergency spills of toxic substances. Several of these staff are already trained in the identification of some aquatic nuisance species, particularly fish. Additional resources for training of the same team or implementation of a similar model could be acquired to react to emergency releases of invasive organisms. These regulations may include authority for preapproved methods of eradication, cooperative functions between agencies, entry onto private property, quarantines or other required verification and control activities.

Emergency rulemaking authority can be a critical tool for rapid response. For example, when state authorities attempted to address pesticide applicator competency issues related to the potential spread of West Nile Virus during 2002 to 2003, they discovered too late that the agency did not have emergency rulemaking authority (Dave Scott, Office of the Indiana State Chemist, pers. comm., August 15, 2003). As a result, the state may have missed out on an entire, and possible critical, mosquito pesticide application season. Emergency rule authority by signature of director of DNR can be used in the event of introduction of an invasive or to prevent an impending introduction, rather going through the normal rule process which usually takes nine months. Emergency rules must be followed by permanent rules to stay in effect beyond the initial period of not more than a year. This authority may need to be extended to other agencies with regulatory jurisdiction over invasive species introductions.

What can Hoosiers do to prevent and control the impacts of ANS?

The goals of this state management plan are designed to address different stages of ANS invasion:

1. preventing the introduction of new nonindigenous species transported from water bodies in other parts of the continent or world;
2. limiting the spread of established, reproducing ANS populations to other water bodies in Indiana and other states; and
3. mitigating the harmful ecological, economic, social, and public health impacts of colonization of ANS populations within water bodies, including the harmful impacts resulting from colonization.

The plan includes the following goals and actions. Approximately 180 strategies and actions are listed under each of 32 objectives. The information for this section was derived from a number of agency meetings, a public meeting on April 15, 2003, and interviews with 43 stakeholders. The list of project reviewers totals over 120 individuals who represent industries, agencies, and organizations with an interest in aquatic nuisance species management. The management actions were made available for public review and comment to determine which tasks should be modified, eliminated or added, and which tasks should be highest priority for the next five-year planning cycle. The group voted at the meeting, and project reviewers not present were allowed an absentee ballot by email, to identify their individual top five priority objectives. Objectives that received at least 50% of the highest number of votes are indicated by a diamond in the *Index to the Strategic Management Plan*. Comments were submitted by attending the second public meeting on July 29, 2003, at The Garrison Conference Center in Indianapolis, Indiana, or by sending comments to the project facilitators prior to August 15, 2003.

The Strategic Management Plan for the Indiana ANS plan outlines all strategies and actions that have been deemed useful for prevention and control of ANS in the state. However, recognizing the limitations of budgets and resources, the state has selected a subset of higher priority actions to focus on initially. The Implementation Table gives the primary and cooperating entities, as well as actual costs for each of the past two fiscal years (FY01-02) and costs for proposed highest priority management actions for the first five years of the program (Appendix F). The Implementation Schedule provides a sequence for high priority actions to be completed within the first two years of project management (Appendix G).

Index to the Strategic Management Plan:
Goals, Strategic Actions, Tasks, and Subtasks

Goals and objectives are indicated in bold type. Strategies that received at least 50% of the highest number of votes for priority rating during the public review are indicated by a diamond (♦).

Goal I. Coordination
♦ I.A. Develop an integrated management plan
I.A.I. Develop a statewide internet web site
I.A.2. Prioritize activities and adhere to timelines
I.A.3. Prioritize enforcement actions
♦I.B. Integrate the state plan with regional and national initiatives
I.B.1. Influence regional and national policies

I.B.2. Participate in regional activities of the Great Lakes basin
I.B.3. Participate in regional activities of the Mississippi River basin

♦I.C. Develop a baseline understanding of ANS issues by the public

I.C.1. Understand and influence public perception
I.C.1.a. Survey public opinion
I.C.1.b. Inform the public about risks and responsibilities
I.C.1.c. Develop a common language
I.C.1.d. Establish relationships with various sectors
I.C.2. Provide the public with current information
I.C.2.a. Explain the criteria that define harmful exotics
I.C.2.b. Develop a publicly-accessible ANS "alert system"
I.C.2.c. Invasive species in statewide conservation initiatives
I.C.2.d. Use primary contact points for educating water users

♦I.D. Build institutional capacity to implement the plan

I.D.1. Institute a state program on ANS management
I.D.1.a. Hire a full time coordinator and staff
I.D.1.b. Create a central clearinghouse
I.D.1.c. Support a statewide interagency task force
I.D.2. Build capacity within professional and citizen organizations
I.D.2.a. Hold public meetings or conferences at least annually
I.D.2.b. Involve citizens in education and management processes

♦I.E. Generate baseline funding to implement the plan

I.E.1. Determine cost-effective principles and priorities for funding
I.E.1.a. Develop tools to assess economic impact
I.E.1.b. Only areas with a budget have intact natural communities
I.E.1.c. Early response to initial infestations
I.E.1.d. Supplementary funding for emergency actions
I.E.2. Consistently fund the plan and programs for long-term benefit
I.E.2.a. Apply existing funding and strategies
I.E.2.b. Support and develop dedicated sources of funding
I.E.2.c. Develop and support private and corporate funding
I.E.2.d. Fund law enforcement for increased focus on ANS

Goal II. Prevention

II.A. Conduct risk assessments

II.A.1 Examine pathways
II.A.1.a. Ballast in Lake Michigan; bilge on the Ohio River
II.A.1.b. Commercial sales of exotic species
II.A.1.c. Global trade and internet sales
II.A.1.d. Remove and replace recreational structures
II.A.1.e. Native species that could spread invasive species
II.A.2 Prioritize species
II.A.2.a. Origin of the species
II.A.2.b. Invasiveness of the species
II.A.2.c. Control points due to physiology, ecology, or use
II.A.3 Analyze impacts
II.A.3.a. Threats to natural resources
II.A.3.b. Calibration and use of analytical tools
II.A.3.c. Threats to commercial use of water
II.A.3.d. Threats to human health
II.A.3.e. Threats to domestic animals and plants
II.A.3.f. Threats to recreational use of water
II.A.4 Prioritize threatened locations
II.A.4.a. Conduct an inventory of uninfested waters
II.A.4.b. Predict vulnerability of certain waters
II.A.4.c. Establish balance of attention across habitat types

II.A.4.d. Public access and spread of exotics

♦II.B. Regulate introduction of exotics

II.B.1. Examine effectiveness of regulation versus education

II.B.1.a. Global trade and internet sales

II.B.1.b. Release of unwanted aquarium pets

II.B.2. Effective state regulations to prevent introductions

II.B.2.a. Participation of state and congressional legislators

II.B.2.b. Enact comprehensive and protective legislation

II.B.2.c. Permitting system that allows controlled use

II.B.2.d. Effects of fragmented or degraded habitat

II.B.2.e. Consider boat trailer laws

II.C. Implement compliance tools

II.C.1. Provide the public with alternatives

II.C.1.a. Identify native species that can be substitutes

II.C.1.b. Encourage pet suppliers to develop policies

II.C.1.c. Dispossession of unwanted pets

II.C.2.100th Meridian and other national programs

II.C.2.a. Travelers taking species to other states

II.C.2.b. Track the contribution of Indiana travelers

II.C.2.c. Support international efforts

II.C.3. Use HACCP prevention plans and training materials

II.C.3.a. Update Indiana DNR containment policies

II.C.3.b. Plans for monitoring programs

II.C.3.c. Plans for earth-moving construction programs

II.C.3.d. Private aquaculture, bait, and live food fish

II.D. Enforce prevention measures

II.D.1. Formalize and train county lake patrols in ANS issues

II.D.2. Enforcement actions and fines

♦II.E. Educate the public on prevention

II.E.1. Unintentional introduction

II.E.1.a. Notify incoming travelers of current distributions

II.E.1.b. Notify Indiana of problems in other areas

II.E.1.c. Use common entry points for education

II.E.1.d. Notify anglers of illegal species

Goal III. Early detection

III.A. Maximize the efforts of monitoring programs

III.A.1. Survey high priority species in at-risk locations

III.A.1.a. Identify high priority species and locations

III.A.1.b. Create an accessible statewide database

III.A.1.c. Current list of exotic and native nuisance species

III.A.1.d. Information on distribution, abundance, and ecology

III.A.1.e. Develop capacity to verify identification of exotics

III.A.1.f. Develop a system to voucher specimens

III.A.2. Develop official coordination between monitoring programs

III.A.2.a. Agency and volunteer water quality monitoring efforts

III.B. Use monitoring for enforcement and control

III.B.1. Validate the presence and urgency of ANS discoveries

III.B.2. Measure the effectiveness of enforcement and education

III.C. Inform and educate on early detection

III.C.1. Progression of species invasions and identify control points

III.C.2. Avoid confusing the public by sending mixed messages

Goal IV. Rapid response

♦IV.A. Plan for rapid response activities

IV.A.1. Coordinate programs

IV.A.1.a. Inventory programs and authority

IV.A.1.b. Identify a lead agency and cooperators
IV.A.2. Develop institutional capacity
IV.A.2.a. Response plans from other states and regions
IV.A.2.b. Regulatory and administrative authorities
IV.A.3. Develop, implement, and evaluate rapid response plans
IV.A.3.a. Identify, classify, and prioritize species
IV.A.3.b. Inventory all available control options
IV.A.3.c. Select the most appropriate methods
IV.A.3.d. Act on species and populations
IV.A.3.e. Use monitoring to evaluate the success
IV.A.3.f. Do not rely on initial project success

IV.B. Inform and educate on rapid response

IV.B.1. Prior to the need for actions, explain to the public
IV.B.2. Use state agency education programs
IV.B.3. Use fishing and hunting program materials

Goal V. Control

♦V.A. Research and develop control methods for priority species

V.A.1. Identify and prioritize species
V.A.1.a. Use risk analysis tools and public input
V.A.1.b. Prioritize control efforts in publicly funded areas
V.A.2. Develop plans to depress populations
V.A.2.a. Fully study management options for milfoil
V.A.2.b. Control of nuisance Cyanobacteria
V.A.2.c. Control of toxin producing nonindigenous algae
V.A.2.d. Control of plants that limit flow in canals
V.A.2.e. Fisheries techniques for renovation and restocking

V.B. Evaluate effectiveness of control measures

V.B.1. Explore impacts on target and nontarget species
V.B.1.a. Conduct surveys on native communities
V.B.1.b. Support development of taxonomists
V.B.2. Capacity for preventing impacts to nontarget species
V.B.2.a. Aquatic plant control and native species
V.B.2.b. Rare aquatic plants competing with milfoil
V.B.2.c. Treatment for whole-lake milfoil infestations

♦V.C. Coordinate control programs

V.C.1. Control efforts into all land use management plans
V.C.1.a. Develop watershed level criteria
V.C.1.b. ANS control in cleanup of contaminated sites
V.C.1.c. Habitat restoration plans
V.C.2. State permitting programs for control methods
V.C.2.a. Aquatic plant control permits
V.C.2.b. Piscicide permits
V.C.2.c. Drinking water supply permits
V.C.2.d. Ensure proper use of pesticides
V.C.2.e. Research on restricted species and tools

♦V.D. Regulate the spread of exotics

V.D.1. State permitting programs to restrict spread of exotics
V.D.1.a. Private stocking permits in public waters
V.D.1.b. Fish health conditions
V.D.1.c. Limits on use of controlled species
V.D.1.d. Periodic review of illegal species possession list
V.D.1.e. Assess role of live food fish trade

♦V.E. Inform and educate on control programs

V.E.1. Incorporate the public directly in control programs
V.E.1.a. Expand capacity for volunteer biocontrol programs

V.E.2. Inform the public on legal and effective control methods
V.E.2.a. Nuisance pest control companies
V.E.2.b. Educate public on ecological effects on nontarget species
V.E.3. Implement educational programs to reduce the transfer
V.E.3.a. Communicate a sense of urgency
V.E.3.b. Communicate economic costs, especially to legislators
V.E.3.c. Improve awareness among boaters and anglers
V.E.3.d. Negative impacts of misguided and illegal stocking
V.E.3.e. Communicate why the agency stocks certain exotic fish
V.E.3.f. Message received by invasives in the record fish program
V.E.3.g. Eradicating an exotic that provides the only habitat
V.E.3.h. Participate in national education campaigns
V.E.3.i. Avoid mixed messages in fish kill damage assessments

Goal VI. Mitigation

VI.A. Identify naturalized species with no effective control methods

VI.A.1. Determine the distribution, rate and mechanism of spread
VI.A.2. Explore eradication or control of naturalized aquatic species
VI.A.3. Identify invasive species having recreational or other uses

VI.B. Encourage use of existing invasive species

VI.B.1. Develop markets for commercial and recreational fisheries
VI.B.1.a. Eliminate size and bag limits
VI.B.1.b. Use existing exotic species, not introducing new ones

VI.C. Develop technology to allow use of contaminated waters

VI.C.1. Treatments to remove offending species or their byproducts
VI.C.1.a. Develop drinking water treatment processes
VI.C.1.b. Treatments of source water for hatcheries
VI.C.1.c. Develop methods of treating fish diseases
VI.C.2. Develop a technology transfer system

Goal VII. Plan evaluation

VII.A. Provide an annual evaluation of the plan

VII.A.1. The ANS program coordinator will prepare an annual report
VII.A.1.a. Facilitate documentation and track actions
VII.A.1.b. Distribute the annual report

VII.B. Conduct a cost-benefit analysis

VII.B.1. The coordinator will track costs of implementing the plan
7.B.1.a. Track use of state general, dedicated, and federal funds
VII.B.2. The coordinator will track benefits of implementing the plan
7.B.2.a. Abatement and control costs estimate the fiscal benefits
VII.B.3. Annual and five-year fiscal analyses of the cost-benefit ratio

VII.C. Use analyses to make mid-course adjustments

VII.C.1. The ANS coordinator will facilitate review of the actions
VII.C.2. These groups will provide recommendations on changes

VII.D. Produce an update to the plan every five years

VII.D.1. Use annual updates and public input

Description of the Strategic Management Plan:
Goals, Actions, Tasks, and Subtasks

Goal I. Coordinate all efforts among agencies and organizations both within Indiana and with other states and nations to manage aquatic nuisance species.

Problem description: Because aquatic nuisance species issues cross the gamut of nearly all natural resource, commercial, recreational, and human health programs, it can be difficult to coordinate efforts. Fragmentation of programs can result in duplication of effort and lack of efficiencies or even conflicting policies in controlling invasive species. Pathways of entry cross state and other jurisdictional lines. Many problem species are located in boundary waters. Coordination of efforts among state agencies and across

the region is essential to effectively prevent and control problems associated with invasive species. Actions that control species in Indiana also prevent the export of problems to other states in the region.

Objective I.A. Develop an integrated state aquatic nuisance species management plan to inform and direct efforts among all entities in the state of Indiana.

Strategy I.A.1. Develop a statewide internet web site for invasive species and post information on plan implementation.

Strategy I.A.2. Prioritize activities and adhere to timelines for implementation.

Strategy 1I.A.3. Prioritize enforcement actions to have maximum impact.

Objective I.B. Integrate the state plan with regional initiatives in the Great Lakes and Mississippi River basins by supporting federal and interjurisdictional regulatory and educational approaches that prevent ANS from entering Indiana.

Strategy I.B.1. Influence regional and national policies by informing decision-makers of ways in which Indiana's ability to prevent and control ANS are affected by regional, federal, and international jurisdiction, policies, and regulations.

Strategy I.B.2. Participate in meetings and activities of the Great Lakes Aquatic Nuisance Species (ANS) Panel, International Joint Commission, Council of Great Lakes Governors, Great Lakes Fishery Commission by attending annual meetings and working with subcommittees, such as the Lake Michigan Committee and Fish Health Committee, and other similar organizations by attending meetings and contributing to policy-making discussions.

Strategy I.B.3. Participate in meetings and activities of the Mississippi Interstate Cooperative Resource Association (MICRA) and especially the Mississippi River Basin Panel (MRBP) on ANS issues, Ohio River Valley Water Sanitation Commission (ORSANCO) and their Ohio River Fish Management Team (ORFMT), and similar organizations by attending meetings and contributing to policy-making discussions.

Objective I.C. Develop a baseline understanding of ANS issues by the public.

Strategy I.C.1. Understand and influence public perception of ANS issues.

Action I.C.1.a. Survey public opinion on the perception of the threat posed by invasive aquatic species.

Action I.C.1.b. Inform the public about the risks and responsibilities associated with invasive species on a similar level with the public perceptions of other forms of water pollution and human health threats.

Action I.C.1.c. Develop a common language for use in all sectors of public education and media. Use photographs, descriptions, and explanations to inform the public about the impacts of invasive species. Create an adequate distribution system for news releases and other public information on the web site and in handouts.

Action I.C.1.d. Establish relationship with and create specific messages for various sectors with special emphasis on the media and less regulated industries such as the pet trade.

Strategy I.C.2. Provide the public with current information on the definition, distribution, and risks of invasive species.

Action I.C.2.a. Explain the criteria used by public agencies to distinguish between and define beneficial and harmful exotic species.

Action I.C.2.b. Develop a publicly-accessible ANS "alert system" with a list of nuisance species existing in and not known from each region. Include public education, not just about which invasive species exist in Indiana, but also about what species are problematic in other parts of the country. Increase public awareness of which species they should avoid transporting across state lines.

Action I.C.2.c. Address invasive species as part of statewide conservation initiatives, such as the natural region assessments in the Indiana Biodiversity Initiative.

Action I.C.2.d. Make better use of primary contact points for educating water users, such as boater registration procedures

through the Bureau of Motor Vehicles and Boater Education programs, to distribute information on ANS.

Objective I.D. Build institutional capacity to implement the plan. Although a number of organizations and agency programs address invasive species, these organizations need a central point of contact to focus and coordinate their efforts.

Strategy I.D.1. Institute a state program on ANS management.

Action I.D.1.a. Hire a full time coordinator and staff for implementation of the ANS plan.

Action I.D.1.b. Create a central clearinghouse for ANS information, including updates to the statewide invasive species web page.

Action I.D.1.c. Support the development of a statewide interagency task force on invasive species. Use the plan to guide efforts on aquatic species and as a model for efforts to address terrestrial species.

Strategy I.D.2. Build capacity within professional and citizen organizations to represent and address constituents information needs (e.g., ILMS, lake associations).

Action I.D.2.a. Hold public meetings, conferences, or workshops at least annually to get updates from state agencies and ensure that all stakeholders understand the issues, participate in prioritization, and know where they can get information. Provide training for local level citizen leaders, including grassroots technical information and communication training. Develop and provide handouts that assist with the transfer of key information.

Action I.D.2.b. Involve citizens in education, prevention, reporting, and control processes by distributing educational kits that are like a little tackle box, having a CD or video in it and collection vials so people could preserve samples, as well as phone numbers and contact information to get samples identified. Currently, the 15 lake associations served by the TELF and ILMS design, print, and distribute 5,000 newsletters each quarter and respond to 100 visits or calls each week, many of which address nuisance plant management and other invasive species issues.

Objective I.E. Generate baseline funding to implement the plan.

Strategy I.E.1. Determine cost-effective principles and state priorities for funding.

I.E.1.a. Develop tools to assess economic impact of invasive species, including species that are not yet known from the state, introduced but not established, and established populations. Use this information to develop funding support for ANS programs.

I.E.1.b. Recognize and communicate to the public that only areas with a budget and commitment to ongoing maintenance will continue to have intact natural communities.

I.E.1.c. Convince the public and implementing agencies that proactive early response to initial infestations will be more cost effective than waiting for severe infestation.

I.E.1.d. Ensure that agencies are provided with adequate supplementary funding and other necessary resources to conduct rapid response actions rather than expecting the agency to absorb unanticipated emergency actions into existing budgets.

Strategy I.E.2. Consistently fund the plan and programs statewide for long-term benefit of the state's economic, ecological, and public health. Target funding and use resources in ways that are the most philosophically or ecologically appropriate from a management standpoint. Adequately fund all necessary aspects of prevention, control, monitoring, early detection, rapid response, and evaluation practices.

Action I.E.2.a. Apply existing funding and strategies to the state plan, including efforts by state agencies and nongovernmental organizations.

Action I.E.2.b. Support and develop dedicated sources of funding for implementation of invasive species activities, such as the LARE boating fees and federal funding through the national Strategy Force.

Action I.E.2.c. Develop and support private funding for implementation. Cultivate corporate sponsors to fund prevention messages.

Action I.E.2.d. Use increases in funding for law enforcement patrols to include more focused efforts on ANS issues and prevention awareness.

Goal II. Prevent new introductions of nuisance aquatic species into the Lake Michigan and Mississippi River basins of Indiana.

Problem description: Aquatic nuisance species may be difficult or impossible to eradicate after they have become established. Therefore, prevention is the most cost-effective, and sometime the only means to avoid damaging results. Often the costs associated with managing a new species are not known, making it difficult to raise support for prevention actions, especially if they limit commercial or recreational activities. A delayed "crisis-response" approach may limit the vision and opportunity for avoiding problems that could be economically costly, technically challenging, and frequently irreversible. Although the state may have to accept some impacts of existing species, the state should make every attempt to hold the line on the introduction of new invasive species.

Objective II.A. Conduct effective risk assessments to assist in classifying new organisms according to the potential for damage and possibility of controlling the species.

Strategy II.A.1 Examine the pathways by which ANS are introduced into Indiana and identify control points that can be addressed by education or regulation. The risk assessment would determine the potential of various pathways to introduce species and identify major control points where intervention could limit transmission or establishment of invasive species.

Action II.A.1.a. Determine the risk associated with ballast water in Lake Michigan and explore the transport of materials in bilge water on the Ohio River.

Action II.A.1.b. Determine the risk associated with commercial sales of exotic species. Some of the risks to be examined would include the use of Asian carps and other exotic fish in aquaculture, nurseries that promote the use of non-native vegetation to pond owners in the increasing backyard pond industry, and importation of species by aquarium dealers.

Action II.A.1.c. Examine the effect of global trade and internet sales.

Action II.A.1.d. Examine risks associated with removal and replacement of recreational structures (e.g., boat lifts; piers; buoys; diving equipment).

Action II.A.1.e. Identify native species that could spread invasive species. For instance, waterfowl may carry exotic algae or plant fragments between water bodies.

Strategy II.A.2 Prioritize species to address invasive organisms with the greatest invasive potential, potential cost, and difficulty of control. Develop or adapt existing standardized risk assessment tools with criteria for rating the invasiveness, cost, and control complications associated with particular species not yet known to be established in Indiana. Predictive factors in the tool would include characteristics of the species such as:

Action II.A.2.a. Origin of the species, including natives introduced outside their range, transfer of natives with altered genomes, and native species that become undesirable species due to changes in conditions.

Action II.A.2.b. Invasiveness of the species, based on other areas in the nation or world that have been colonized.

Action II.A.2.c. Identify trigger points or control points of invasive species introduction, release, and establishment related to the physiology, ecology or use of the species.

Strategy II.A.3. The tool must analyze impacts on natural resources and water use, including:

Action II.A.3.a. Threats to natural resources, including biodiversity, state and federal T&E species, habitat degradation including native plant communities. For instance, wetland communities are impaired by buckthorn, hybrid cattails, phragmites, and other invasive plants.

Action II.A.3.b. Influence of the presence of exotic species on calibration and use of analytical tools used to assess the integrity

of water and ecological communities.

Action II.A.3.c. Threats to commercial use of water, including reduced operating efficiencies and control costs, impairment of water conveyance, withdrawal, and drinking water treatment processes. For instance, live zebra mussels and dead shells of oriental mystery snails increase the cost of maintaining intakes for cooling water at power plants and source water piping for other utilities. Eurasian watermilfoil and curly-leafed pondweed interferes with the flow of water in conveyance canals (e.g., drinking water supply, drainage and stormwater management). Bluegreen algae (cyanobacteria) can compromise drinking water quality due to taste and odor or toxin production.

Action II.A.3.d. Threats to human health through direct or indirect introduction. Conduct a risk analysis regarding the human health impacts of nonindigenous algae species (e.g., *Cylindrospermopsis*) that can produce toxins in drinking water and recreational use waters. Animal vectors may transmit zoonotic pathogens and parasites to humans (e.g., mosquitoes carrying West Nile virus; infective parasites consumed in uncooked fish flesh).

Action II.A.3.e. Threats to domestic animals and plants used in aquaculture and nurseries. Exotic animals may spread parasites and pathogens through the source water for state or private fish hatcheries. Costs to the producer can include costs of disinfection or limits on the sale of infested animals or plants.

Action II.A.3.f. Threats to recreational use of water. Examine impairment of lakes and reservoirs by Eurasian watermilfoil and impacts of zebra mussels on use of swimming beaches.

Strategy II.A.4. The tool must prioritizing threatened locations, such as:

Action II.A.4.a. Conducting an inventory of uninfested waters and prioritizing them for protection with particular attention to source waters for human consumption and aquaculture production.

Action II.A.4.b. Predicting vulnerability of certain waters to new ANS, including an analysis of the progression of new species in Lake Michigan.

Action II.A.4.c. Establishing an appropriate balance of attention to effects on various habitat types, including lakes, wetlands, and streams, possibly with a need to increase attention to river and stream communities.

Action II.A.4.d. Analyzing association between public access and spread of exotics (e.g., boat launches, boating activities fragmenting milfoil). The analysis should address ill feelings among lake residents toward state government where Indiana's public accesses have resulted in destructive exotic introductions, but the state has provided little assistance in controlling the resulting problems.

Objective II.B. Regulate the introduction of exotics, including education, regulation, compliance tools, and enforcement.

Strategy II.B.1. Examine effectiveness of regulation versus education in the following areas:

Action II.B.1.a. Determine an effective strategy for reducing the release of species acquired through pet stores, global trade, and internet sales, and determine the risk of these species transmitting associated pathogens and parasites to humans.

Action II.B.1.b. Determine an effective strategy for controlling release of unwanted aquarium pets (e.g., reducing the "dump and flush" mentality).

Strategy II.B.II. Develop effective state regulations to prevent introductions of invasive species.

Action II.B.II.a. Acquire participation of state and congressional legislators in implementation of the ANS plan.

Action II.B.2.b. Enact comprehensive and protective legislation, using state regulation to prevent movement from Lake Michigan to inland waters and regional or national regulations for movement within the Great Lakes. Legislation must include appropriate definitions for ANS in statutes and administrative rules.

Action II.B.2.c. Institute a permitting system that allows controlled use of fish in production facilities for aquaculture, food, research on warmwater and coldwater fish for aquaculture use, and stocking of beneficial exotic species in public waters for

recreational and commercial use.

Action II.B.2.d. Address the effects of fragmented or degraded habitat resulting from aquatic and riparian habitat modification as a precursor to invasion by exotics in all state and local permitting programs, including aquatic plant control, lake shoreline construction, maintenance of drainage ditches, and construction in and around wetlands.

Action II.B.2.e. Consider the use of boat trailer laws to avoid spreading Eurasian watermilfoil, zebra mussels, and other species that cling to hard surfaces and propellers. Preventive regulations should focus on discouraging interstate travelers from bringing invasive species into the state.

Objective II.C. Develop and implement compliance tools that enable better adherence to regulations and minimize practices that could introduce invasive species.

Strategy II.C.1. Provide the public with alternatives to using or releasing invasive exotic species.

Action II.C.1.a. Identify native species that can be substitutes for invasive species in aquaculture, the pet trade, and landscaping.

Action II.C.1.b. Encourage dealers and educational institutions to develop policies on selling risky species as pets or for educational use.

Action II.C.1.c. Create a safe and accessible means for the dispossession of unwanted pets.

Strategy II.C.II. Participate as a state in the 100th Meridian Initiative, Protect Our Waters, and other targeted regional, national, and international programs.

Action II.C.2.a. Institute policies and educational programs that discourage Indiana travelers from taking nuisance species to other states, either intentionally or accidentally.

Action II.C.2.b. Participate in tracking activities to determine the contribution of Indiana travelers to distribution of invasive species. Available data shows that people from Lake and Cass Counties in Indiana have crossed the 100th Meridian with boats. There is a risk that they and others from those from those counties could transport zebra mussels from Indiana to waters west of the 100th Meridian.

Action II.C.2.c. Support international efforts to control movement of new species by participating in national and international education, law enforcement, and regulatory activities at the Indianapolis international airport and other venues.

Strategy II.C.3. Use HACCP prevention plans and training materials for each introduction pathway used by private entities, public agencies, and land use programs.

Action II.C.3.a. Update Indiana DNR containment policies on zebra mussels to include other invasive species that could be spread by activities such as fish hatchery, survey, and stocking practices.

Action II.C.3.b. Develop prevention plans for monitoring and survey practices of the Indiana Department of Environmental Management, local health or resource management agencies, and volunteer monitoring programs.

Action II.C.3.c. Develop policies for the Indiana Department of Transportation, IDNR property management, and other agencies that use earth-moving construction practices that may introduce ANS into new development sites or create amenable environments for invasion of nuisance species.

Action II.C.3.d. Develop and institute training for prevention plans in the private aquaculture, bait, and live food fish industry.

Objective II.D. Enforce prevention measures.

Strategy II.D.1. Formalize county lake patrols funded by local property owners with better training, better reporting, and agency-directed focus on critical issues such as ANS education and training.

Strategy II.D.II. Determine appropriate use of enforcement Objectives for “bad actors” who refuse education and voluntary

compliance with fines that would be a deterrent.

Objective II.E. Educate the public on the benefits of preventing introductions of invasive species.

Strategy II.E.1. Provide the public with information that reduces the chance of unintentionally introducing new species into or from Indiana.

Action II.E.1.a. Use the invasive species "alert system" to identify the current distribution of species and notify incoming travelers of species that could pose a problem for Indiana.

Action II.E.1.b. Use the invasive species "alert system" to notify travelers leaving Indiana of species present in this state that could pose a problem for other states or regions.

Action II.E.1.c. Use common entry points, such as kiosks at airports and in welcome stations and information on state highway maps, to inform travelers of high-risk invasive species.

Action II.E.1.d. Notify anglers of species that are illegal to possess live through information in the annual fishing regulation guidebook (*Fishing Guide*).

Goal III. Conduct monitoring programs to enhance early detection of introductions or invasions.

Problem description: Monitoring programs often get short shrift in prioritization of agency or organizational activities due to the delay in realizing the benefits of the program. However, early cost-effective control or eradication of an invasive species or associated pathogen cannot be achieved without early detection of the offending organism. Various agencies and organizations are monitoring water bodies for their own purposes. Coordination between these efforts would maximize the use of limited resources. Because costly or controversial eradication or enforcement Objectives may result, training is essential to verify that the species was properly identified in the monitoring effort.

Objective III.A. Maximize the efforts of monitoring programs to ensure that detections of invasive species are properly detected, verified, and reported.

Strategy III.A.1. Survey and catalogue high priority species in at-risk locations.

Action III.A.1.a. Use the risk assessment to identify high priority species and locations thought to be particularly at risk of introduction or invasion.

Action III.A.1.b. Create an accessible statewide database for monitoring information.

Action III.A.1.c. Maintain a current list of exotic and native nuisance species that occur in Indiana.

Action III.A.1.d. Compile basic information on the distribution, abundance, and ecology of priority and established invasive species.

Action III.A.1.e. Develop institutional capacity or access to individuals who can verify identification of critical invasive species.

Action III.A.1.f. Develop a system to verify the identification of exotic species and ensure vouchering of specimens in appropriate scientific institutions.

Strategy III.A.2. Develop official coordination mechanisms to reduce duplication of effort or gaps in coverage.

Action III.A.2.a. Coordinate existing agency and volunteer water quality monitoring efforts to ensure maximum coverage of high priority waters in Indiana where ANS could potentially invade. Efforts may include extension of the annual DNR-sponsored fish sampling coordination meeting to include other aquatic sampling efforts, review of applications for Scientific Purposes Permits (previously called "Collectors Permits") to identify efforts in or near high priority at-risk areas, periodic hosting of training workshops to enable identification of new ANS, and other mechanisms.

Objective III.B. Use monitoring information to enhance and evaluate the effectiveness of enforcement and control efforts.

Strategy III.B.1. Use monitoring information as a mechanism to validate the presence and urgency of ANS discoveries before acting to conduct further investigations, inform the public, control the populations, or take enforcement Objectives.

Strategy III.B.2. Use monitoring information as a tool to measure the effectiveness of enforcement and education programs, after distinguishing between species that are distributed by human activities rather than moving naturally through waterways.

Objective III.C. Inform and educate the public on the benefits and reasons for early detection programs.

Strategy III.C.1. Use monitoring information to show the public the progression of species invasions and identify control points for reducing the introduction of new species.

Strategy III.C.2. Avoid confusing the public by sending mixed messages on the severity of problems associated with newly introduced species.

Goal IV. Institute rapid response Objectives to limit the cost of controlling new introductions.

Problem description: Many techniques for eradicating or controlling invasive species are either very labor intensive (e.g., removing individual plants by hand) or nonselective (e.g., use of piscicides to kill invasive fish; destruction of an entire lot of infected fish and disinfection of the hatchery). Therefore, it is much more cost-effective and acceptable to apply these techniques when the infested area is small. However, the nature of the treatment methods may require use of techniques that would normally involve significant education of the public to obtain their approval, may involve intrusion on private property, and intensive coordination between agencies with differing authorities. If the plans are not developed and approved prior to emergency use, the conflicts that result could severely hamper the implementation and effectiveness of the early control or eradication.

Objective IV.A. Plan for rapid response activities.

Strategy IV.A.1. Coordinate programs available to conduct rapid response activities.

Action IV.A.1.a. Inventory programs and authority available for rapid response in each region of the state.

Action IV.A.1.b. Identify a lead agency and responsibility of other cooperating agencies.

Strategy IV.A.2. Develop institutional capacity for rapid response activities.

Action IV.A.2.a. Review response plans from other states and coordinate the plans with efforts of other regional organizations.

Action IV.A.2.b. Establish all regulatory and administrative authorities needed for effective and timely response to aquatic invasive species on public and private property.

Strategy IV.A.3. Develop, implement, evaluate, and adjust rapid response plans for particular species to effectively control new invasions when necessary and feasible.

Action IV.A.3.a. Identify, classify, and prioritize species that under certain conditions may be amenable to eradication through rapid response Objectives.

Action IV.A.3.b. Inventory all available chemical, physical and biological control options for each high priority species that could invade an area.

Action IV.A.3.c. Select the most appropriate methods given physical, institutional, and social constraints. Ensure that the impacts of the treatment on nontarget organisms are commensurate with the overall likelihood of negative effects if the target invasive species becomes established.

Action IV.A.3.d. Act on species and populations requiring rapid response.

Action IV.A.3.e. Use monitoring to evaluate the success of control measures and make adjustments to response plans.

Action IV.A.3.f. Do not rely on initial project success to solve a problem that will likely require diligence for over a long period of time.

Objective IV.B. Inform and educate the public on the need for rapid response Objectives.

Strategy IV.B.1. Prior to the need for Objectives, explain to the public the reasons for conducting rapid response measures, which may include impacts on nontarget organisms.

Strategy.IV.B.2. Use state agency education programs to encourage volunteer monitoring and reporting, such as Riverwatch, Lake Volunteer Monitoring, Project WILD, Project WET, conservation and recreational sporting clubs, and Adopt-a-Wetland programs.

Strategy IV.B.3. Use fishing and hunting program materials to encourage volunteer monitoring and reporting.

Goal V. Limit the spread of established populations of aquatic nuisance species into uninfested waters of the state.

Problem description: Any aquatic nuisance species that has successfully become established in a large ecosystem is unlikely to be eradicated by currently available control methods. Limiting the spread of established species into uninfested waters must receive top priority in research, education, and enforcement programs. Often a species is unnecessarily spread simply by routine activities of uninformed water resource users. The public must understand how species are spread, why it is important to limit their spread, what methods are available for control, and how those control measures can have unintended adverse consequences.

Objective V.A. Research and develop control methods for priority species.

Strategy V.A.1. Identify and prioritize species requiring control Objectives.

Action V.A.1.a. Use risk analysis tools and public input to identify high priority species for control. Priority species that have been identified by the project reviewers include:

-- zebra mussels affecting cooling water plants;
-- toxin-producing algae (*Cylindrospermopsis*) in water used for drinking and recreation;
-- purple loosestrife;
-- Asian carps; and
-- giant cane grass (*Phragmites*).

Action V.A.1.b. Prioritize control efforts that target invasive species that reduce the value of resources that are maintained by public funds (e.g., sport fisheries, threatened and endangered species, public properties) and accessible to the public.

Strategy V.A.2. Develop plans to either depress populations of established species or to slow the rate of range expansion of established species.

Action V.A.2.a. Fully study management options for milfoil (e.g., harvesting, weevil biocontrol techniques).

Action V.A.2.b. Analyze and implement control of nuisance Cyanobacteria (e.g., *Pseudoanabaena*) blooms creating taste and odor problems in drinking water supplies (e.g., Geist, Morse and Eagle Creek reservoirs). Control can include nutrient management in watersheds, herbicide treatment, and filtration or other chemical treatments in the water supply facility.

Action V.A.2.c. Develop effective control methods for nonindigenous algae species (e.g., *Cylindrospermopsis*) that can produce toxins in drinking water and recreational use waters.

Action V.A.2.d. Develop effective control methods for plants (e.g., Eurasian watermilfoil) that limit flow in canals to large drinking water treatment plants and in drainage ditches.

Action V.A.2.e. Continue the use of fisheries techniques (e.g., exclusionary devices, renovation and restocking, habitat protection and restoration) that control the spread of harmful exotic fish in public access waters.

Objective V.B. Evaluate the effectiveness of control measures in preventing or reducing the spread of established invasive species.

Strategy V.B.1. Explore impacts on target and nontarget species. Examine the short- and long-term effects to ensure that the cure will not be worse than the disease.

Action V.B.1.a. Conduct surveys on native communities adequate to predict and track the impacts of control measures on nontarget species.

Action V.B.1.b. Support development of taxonomists who can identify native and exotic species.

Strategy V.B.2. Develop capacity for preventing impacts to nontarget species.

Action V.B.2.a. Conduct research on impacts of aquatic plant control in lakes on native species composition in order to avoid effects on rare, threatened or endangered species.

Action V.B.2.b. Explore methods of conservation for rare aquatic plant species succomb to competition with milfoil.

Action V.B.2.c. Support research and development of treatment and eradication options for severe whole-lake milfoil infestations. Existing tools are becoming limited because whole lake herbicide treatments may have unacceptable adverse impacts.

Objective V.C. Coordinate control efforts to maximize effectiveness of programs.

Strategy V.C.1. Incorporate exotic species control efforts into all land use management plans.

Action V.C.1.a. Develop watershed level criteria for use of control methods to reduce the possibility the species will be eradicated from one part of the watershed and be reintroduced from another area upstream or downstream.

Action V.C.1.b. Include exotic species control in plans for cleaning up sites that were contaminated by other pollutants.

Action V.C.1.c. Address invasive species as part of habitat restoration plans, including the USFWS Partners for Fish and Wildlife program, NRCS wetland reserve program, and IDNR certified wildlife habitat or forestry projects.

Strategy V.C.2. Establish effective and responsive state permitting programs for control of ANS.

Action V.C.2.a. Include effective means of controlling invasive plants in review criteria for permits for use of herbicides in public waters.

Action V.C.2.b. Include effective means of controlling invasive fish in review criteria for permits for use of piscicides in public waters.

Action V.C.2.c. Ensure that drinking water supply permits provided by the Department of Environmental Management account for an effective means of controlling invasive aquatic plants and animals, while protecting safe water supplies.

Action V.C.2.d. Ensure that pesticides used are registered with the Office of the State Chemist, used according to label directions, and applied by competent and licensed handlers.

Action V.C.2.e. Implement a permitting system that allows research to be conducted on restricted species, biocontrol methods, and innovative tools for limiting the spread of invasive exotics.

Objective V.D. Implement and enforce regulations to control the spread of invasive species within Indiana.

Strategy V.D.1. Establish effective and responsive state permitting programs that prevent the spread of ANS.

Action V.D.1.a. Ensure that review criteria for private stocking permits assess risks associated with use of potentially invasive game species.

Action V.D.1.b. Ensure that conditions on private stocking permits prevent the spread of pests and pathogens associated with stocked fish.

Action.V.D.1.c. Implement regulations for the use of controlled species, such as grass carp, that are adequate to ensure that fish will not be released into public waters or damage private resources.

Action V.D.1.d. Conduct periodic evaluations of the rules listing species that are illegal to possess live to ensure that any high risk species are included to limit distributions in Indiana.

Action V.D.1.e. Assess volume of trade in the live food fish industry to identify invasive species sold, risks of introduction, and need for regulation including containment, disposition, and treatment of holding tank water.

Strategy V.D.2. Provide adequate resources for the enforcement of all regulations that control the spread of invasive species in Indiana.

Objective V.E. Inform and educate the public on control programs.

Strategy V.E.1. Incorporate the public directly into implementation and management of invasive species control projects whenever feasible to develop a sense of ownership.

Action V.E.1.a. Expand existing capacity to add educational institutions, lake associations, and other organizations in volunteer biocontrol projects using purple loosestrife beetles.

Strategy V.E.2. Inform the public on legal and effective means of controlling invasive species.

Action V.E.2.a. Provide information and training to companies involved in nuisance pest control that includes brochures and other materials to use in educating the public on invasive species issues.

Action V.E.2.b. Educate public on ecological effects on nontarget species when nonselective tools are used to eradicate ANS.

Strategy V.E.3. Implement educational programs to reduce the transfer of invasive species.

Action V.E.3.a. Communicate a sense of urgency and concern about introduction of aquatic aquaculture (e.g., fish) and human (e.g., West Nile virus) diseases using models from other terrestrial diseases (e.g., CWD, monkey pox).

Action V.E.3.b. Communicate economic costs associated with bringing in ANS for commercial use, especially to legislators, possibly through workshops.

Action V.E.3.c. Provide information to improve awareness among boaters and anglers that move from one water to the next.

Action V.E.3.d. Provide information regarding the negative impacts of misguided and illegal stocking of known nuisance species by anglers (e.g., gizzard shad as a forage base for sport fish) and divers (e.g., zebra mussels in anticipation of clearer water).

Action V.E.3.e. Clearly communicate to the public why the agency stocks certain exotic fish but limits private stocking of other exotics.

Action V.E.3.f. Evaluate the message received by the public when state agencies recognize invasive exotic species in the record fish program.

Action V.E.3.g. Provide public forum for discussion of costs of eradicating an exotic that is providing the only available habitat (e.g., milfoil monocultures in lakes).

Action V.E.3.h. Participate in or adapt materials from national education campaigns, including the International Association for Fish and Wildlife Agencies (IAFWA) ANS communication project, “Stop Aquatic Hitchikers” program for recreational boaters and anglers, and a similar forthcoming Sea Grant educational campaign for aquarium and pet owners.

Action V.E.3.i. Avoid sending mixed messages in natural resource damage assessments by communicating with the public that liability for fish kills in a pollution event includes impacts on ecosystems that contain or even primarily consist of invasive species. These Objectives do not imply that those species or communities are preferred conditions.

Goal VI. Mitigate harmful ecological, economical, social, and public health impacts resulting from infestations of aquatic nuisance species.

Problem description: A number of harmful exotic species have become established in public waters and have few if any cost-effective or technologically viable means of controlling or eradicating the species. In recognition of the irreversible changes in these systems, the most rational approach to dealing with these species may be to develop recreational or commercial uses. Where the species are interfering with water uses, technology must be implemented or developed to allow continued use of the water.

Objective VI.A. Conduct an analysis to identify species that are naturalized and for which no means of eradication or control is feasible.

Strategy VI.A.1. Determine the distribution, rate of spread, and mechanism of spread for species that are widely distributed and naturalized in the state.

Strategy VI.A.2. Explore all means of eradicating or eliminating naturalized aquatic species.

Strategy VI.A.3. Identify invasive species that may have recreational or other uses

Objective VI.B. Encourage recreational use of naturalized aquatic nuisance species.

Strategy VI.B.1. Develop markets for recreational fisheries for naturalized species having no viable control methods, such as common carp. Fisheries development must be used only as a means of eradicating or controlling invasive species, not an incentive to propagate or reintroduce these species.

Action VI.B.1.a. Eliminate size and bag limits on all invasive exotic species, but require all such species to be killed immediately upon capture.

Action VI.B.1.b. Encourage use of existing species of carp as food fish rather than introduction of new species or varieties of carp.

Objective VI.C. Develop and implement technology to allow continued use of irreversibly contaminated waters.

Strategy VI.B.1. Conduct research and development on cost-effective treatments to remove offending species or their byproducts that spoil the quality of water for particular uses.

Action VI.B.1.a. Develop drinking water treatment processes to remove toxic or repugnant substances produced by nonnative algae.

Action VI.B.1.b. Develop chemical or physical treatments of source water for hatcheries that removes zebra mussel veligers without affecting fish eggs and fry.

Action VI.B.1.c. Develop methods of treating diseases of trout and salmon, such as whirling disease and bacterial kidney disease.

Strategy VI.B.2. Develop a technology transfer system through cooperative efforts of universities, agencies, and trade organizations to encourage the use of mitigating techniques.

Goal VII. Evaluate the effectiveness of the plan and use adaptive management strategies to update the plan during initial implementation and after the five-year period of use.

Problem description: Adequate evaluation processes are necessary to ensure that the management plan remains up to date and accommodates changes in the rapidly shifting field of aquatic nuisance species. Funding and implementation of the plan depend upon being able to demonstrate results and fiscal responsibility.

Objective VII.A. Provide an annual evaluation on the implementation and effectiveness of the plan.

Strategy VII.A.1. The ANS program coordinator will prepare an annual report on the effectiveness of the plan and.

Action VII.A.1.a. The coordinator will facilitate documentation and track Objectives by the agencies and organizations that implement activities under the plan.

Action VII.A.1.b. The coordinator will distribute the annual report to the agencies and public.

Objective VII.B. Conduct a cost-benefit analysis for the ANS program.

Strategy VII.B.1. The coordinator will track costs of implementing the plan.

Action VII.B.1.a. The coordinator will track the use of state general funds, dedicated funds, and return of federal funds to Indiana as they were used to implement the plan.

Strategy VII.B.2. The coordinator will track benefits of implementing the plan.

Action VII.B.2.a. The coordinator will use published literature and actual costs of abatement and control to estimate the fiscal benefits of the plan in conducting activities that resulted in avoiding costs associated with damages incurred from invasive species.

Strategy VII.B.3. The coordinator will prepare annual and five-year fiscal analyses indicating the cost-benefit ratio for implementing the plan.

Objective VII.C. Use information from the evaluation to make mid-course adjustments to the plan.

Strategy VII.C.1. The ANS coordinator will facilitate review of the Objectives by the state invasive species Strategy force and other constituencies.

Strategy VII.C.2. These groups will provide recommendations on any changes that should be made to improve implementation of the plan.

Objective VII.D. Produce an update to the plan every five years.

Strategy VII.D.1. The coordinator will use information from annual updates and input from implementing agencies, organizations, and the general public to produce an update to the long-term plan every five years.

How will we know if we succeeded?

The evaluation process of Indiana's State ANS Management Plan allows monitoring of progress toward prevention, limitation and abatement of ANS. Recognizing the volatile and unpredictable nature of ANS introductions, it is reasonable to believe that the plan will require periodic mid-course changes. The process will involve three components: 1) oversight, 2) evaluation, and 3) dissemination of information. The following will briefly discuss each of these components.

Oversight

An ANS Advisory Council will be composed of external publics (identified as interested parties during the review process), other state and federal agencies (e.g., IDEM, ISDH, Commissioner of Agriculture's Office, APHIS, USFWS), a representative from the Governor's office, and members from the original task force who authored this document. The role of this interagency council will be to examine progress on management actions focused on three goals of the state management plan. The committee can evaluate the success of each strategic action by examining the level of achievement of the tasks clearly defined within each action. The committee will also function in relation to the proposed state Invasive Species Council.

Evaluation

The evaluation effort should not only examine progress, but also place a special emphasis on identifying funding needs to successfully accomplish goals and associated tasks. Performance measures will be used to assess the effectiveness of management objectives. For instance, on an annual basis this might include:

- whether or not objectives are achieved;
- rate of spread along a river reach or coastline;

- change in total acreage of habitat occupied by the ANS or the displaced native species;
- changes in abundance of an invader and directly or indirectly impacted species; or
- changes to Federal and State T&E and extinct species lists due to ANS.

It is recognized that unforeseen factors may impact the progress of remedying a problem and this would be evident through program monitoring and evaluation. This information will prove useful in future program planning processes. Evaluation should also incorporate information from those groups affected by plan implementation. These include organizations (or individuals) involved with the responsibility of implementing management actions and resource user groups.

Dissemination

An annual report will be prepared and distributed, highlighting the progress of strategic management actions. This report will include information on the successes in achieving the seven goals (i.e., coordination, prevention, early detection, rapid response, control, mitigation, and plan evaluation) of the ANS plan as well as future plans and directions. Successes, failures, and new directions within Indiana will be evaluated in comparison with other regional plans in the Great Lakes and Mississippi River / Ohio River basins. The annual report will be available to the members of the general public and local, state, and federal decision makers.

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Glossary of Terms

aquatic nuisance species (ANS): An aquatic species that threatens the diversity or abundance of native species, the ecological stability of infested waters, or commercial, agricultural, aquaculture or recreational activities dependent on such waters. For purposes

of state ANS management plans, reference to an aquatic nuisance species will imply that the species is nonindigenous.

ballast water: any water and associated sediments used to manipulate the trim and stability of a vessel.

environmentally sound: methods, efforts, actions or programs to prevent introductions or control infestations of aquatic nuisance species that minimize adverse impacts to the structure and function of an ecosystem and adverse effects on nontarget organisms and ecosystems and emphasize integrated pest management techniques and nonchemical measures.

exotic species: any species or other viable biological material that enters an ecosystem beyond its historic range, including any such organism transferred from one country to another. Equivalent to "nonindigenous" species.

federal consistency (*): a requirement under the Coastal Zone Management Act that stipulates that federal actions that are reasonably likely to affect land or water use or natural resources of the coastal zone be consistent with the enforceable policies of a coastal state's federally approved coastal management program. A coastal state reviews the federal action to determine if the proposed action will be consistent with the program.

Great Lakes: Lake Ontario, Lake Erie, Lake Huron (including Lake St. Clair), Lake Michigan, Lake Superior, and the connecting channels (Saint Mary's River, Saint Clair River, Detroit River, Niagara River, and Saint Lawrence River to the Canadian Border), and includes all other bodies of water within the drainage basin of such lakes and connecting channels.

nonindigenous species: any species or other viable biological material that enters an ecosystem beyond its historic range, including any such organism transferred from one country to another. Equivalent to "exotic" species.

waters of the United States: the navigable waters and the territorial sea of the United States.

unintentional introduction: an introduction of nonindigenous aquatic species that occurs as the result of activities other than the purposeful or intentional introduction of the species involved, such as the transport of nonindigenous species in ballast or in water used to transport fish, mollusks or crustaceans for aquaculture or other purposes.

watershed: an entire drainage basin, including all its living and nonliving components.

List of agency and organization acronyms
319: IDEM Watershed Management program providing grants under Section 319 of the Clean Water Act
AC: ANS Advisory Committee (all stakeholders)
APHIS: Animal and Plant Health Inspection Service
BASS: Bass Anglers Society Indiana
BOAH: Board of Animal Health
CLP: IU-SPEA and IDEM Clean Lakes Program
Coop Ext: cooperative extension service
CZM: Coastal Zone Management
DEP: Division of Entomology and Plant Pathology
DFW: Division of Fish and Wildlife
DNP: Division of Nature Preserves
DNR: Department of Natural Resources
DSC: Division of Soil Conservation
FWS: US Fish and Wildlife Service
GLC: Great Lakes Commission
IAA: Indiana Aquaculture Association
IAFS: Indiana Chapter of the American Fisheries Society
IBI: Indiana Biodiversity Initiative
IDEM: Indiana Department of Environmental Management
ILMS: Indiana Lakes Management Society
InDOT: Indiana State Department of Transportation
ISDH: Indiana State Department of Health
ISL: Indiana State Legislature
IUPUI: Indiana University - Purdue University

IUPUI-CEES: IUPUI Center for Earth and Environmental Science
IU-SPEA: Indiana University School of Public and Environmental Affairs
LARE: Lake and River Enhancement program
LE: Division of Law Enforcement
MICRA: Mississippi Interstate Cooperative Resource Association
MRBP: Mississippi River Basin Panel (on ANS)
NANPCA: Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (Public Law 101-646)
NRCS: Natural Resources Conservation Service
NRDA: Natural Resource Damage Assessments
OCA: Office of the Commissioner of Agriculture
ORFMT: Ohio River Fish Management Team
ORSANCO: Ohio River Valley Water Sanitation Commission
OISC: Office of the Indiana State Chemist
TELWF: Tippecanoe Environmental Lake and Watershed Foundation
TNC: The Nature Conservancy
TWS: The Wildlife Society

APPENDIX A: List of introduced fish and crayfish

List of Non-indigenous and exotic fish and crayfish species occurring in Indiana waters. *Range:* Statewide (I), north (N), south (S), west (W), east (E), and various combinations of these regions. *Relative abundance:* R = rare; C = common; O = occasional. *Conservation status:* NI = nonindigenous, E = exotic. Source: Tom Simon, U.S. Fish and Wildlife Service.

COMMON AND SCIENTIFIC NAME	RANGE	RELATIVE ABUNDANCE	STATUS
CLASS OSTEICHTHYES			
Order Petromyzontiformes (lampreys)			
Family Petromyzontidae (lamprey)			
Petromyzon marinus Linnaeus, sea lamprey	NW	O	NI
Order Clupeiformes (herring, shad)			
Family Clupeidae (herrings)			
Alosa psuedoharengus(Wilson), alewife	NW	A	NI
Dorosoma petenense (Gunther), threadfin shad	S	C	NI
Order Cypriniformes (carps and minnows)			
Family Cyprinidae (carps and minnows)			
Carassius auratus (Linnaeus), goldfish	I	C	E
Ctenopharyngodon idella (Valenciennes), grass carp	NW, C	O	E
Cyprinella lutrensis(Baird & Girard), red shiner	NW	O	NI
Cyprinus carpio Linnaeus, common carp	I	A	E
Hypopthalmichthys molitrix (Valenciennes), silver carp	SE, SW	R	E
Hypopthalmichthys nobilis (Richardson), bighead carp	SW	O	E
Scardinius erythrophhthalmus (Linnaeus), rudd	NW	O	E
Order Siluriformes (bullhead and catfish)			
Family Ictaluridae (bullhead and catfish)			
Ameiurus catus (Linnaeus), white catfish	C, S	O	NI
Order Salmoniformes (trout, salmon, whitefish)			
Family Osmeridae (smelt)			
Osmerus mordax (Mitchill), rainbow smelt	NW	C	NI
Family Salmonidae (salmon and whitefish)			
Oncorhynchus kisutch (Walbaum), coho salmon	NW	C	NI

Oncorhynchus mykiss (Walbaum), rainbow trout	N	C	NI
Oncorhynchus tshawytscha (Walbaum), chinook salmon	NW	C	NI
Salmo salar Linnaeus, Atlantic salmon	NW	O	NI
Salmo trutta Linnaeus, brown trout	N	C	E
Order Cyprinodontiformes (topminnows)			
Family Poeciliidae (live-bearing fishes)			
Gambusia affinis (Baird & Girard), mosquitofish	W	O	NI
Order Atheriniformes (silversides)			
Family Atherinidae (silversides)			
Menidia beryllina (Cope), inland silverside	S	R	NI
Order Mugiliformes			
Family Mugilidae (mullets)			
Mugil cephalus Linnaeus, striped mullet	S	R	NI
Order Gasterosteiformes (sticklebacks)			
Family Gasterosteidae (sticklebacks)			
Gasterosteus aculeatus Linnaeus, threespine stickleback	NW	O	NI
Order Perciformes (basses, sunfish, perch, darters, gobies)			
Family Moronidae (temperate basses)			
Morone americana (Gmelin), white perch	NW	R	NI
Morone saxatilis (Walbaum), striped bass	S	O	NI
Family Gobiidae (gobies)			
Neogobius melanostomus (Pallas), round goby	NW	A	E
Order Decapoda			
Family Cambaridae (crayfish)			
Genus *Procambarus*			
Subgenus *Scapulicambarus*			
Procambarus clarkii (Girard), red swamp crayfish	NW, SW	R	NI

NOTE: *P. clarkii* is native to SW Indiana, but NI to NW portions of the state.

Genus *Orconectes*			
Subgenus *Procericambarus*			
Orconectes rusticus (Girard), rusty crayfish	I	C	NI

NOTE: *O. rusticus* is native to the Whitewater and Maumee River basins, but NI elsewhere

APPENDIX B: List of invasive aquatic plants

Below is a list of common and scientific names for nonindigenous aquatic plant species that are confirmed from Indiana by the U.S. Geological Survey (USGS). The information was provided by Scott Shuler, Aquatic Control, Seymour, Indiana.

Brazilian waterweed or Brazilian elodea (*Egeria densa*)

brittle naiad (*Najas minor*)

curlyleaf pondweed (*Potamogeton crispus*)

Eurasian watermilfoil (*Myriophyllum spicatum*)

European waterclover (*Marsilea quadrifolia*)

flowering rush (*Butomus umbellatus*)

purple loosestrife (*Lythrum salicaria*)

watercress (*Nasturtium officinale*)

yellow floatingheart (*Nymphoides peltata*)

yellow iris (*Iris pseudacorus*)

These are additional exotic species found within the state by staff of aquatic plant control companies:

Asian lotus (*Nelumbo nucifera*) - the exact species has not been confirmed. However, this is the likely species and it is present in Oswego Lake per my survey last summer. There is a patch about 50 feet by 20 feet.

common reed (*Phragmites australis*) – originally most common in the northwest part of Indiana, now occurring statewide.

fanwort (*Cabomba carolinian*) - Not confirmed but most likely in two locations in northern Indiana according to Weed Patrol.

giant reed (*Arundo donax*) - The Center for Aquatic Plants lists this exotic for Indiana.

hydrilla (*Hydrilla verticillata*) - This plant will survive in Indiana, spreads easily and quickly and will typically out-compete Eurasian watermilfoil and take over a lake. This plant is not known from Indiana but represents a significant concern.

parrotfeather (*Myriophyllum aquaticum*) - This plant is established in several private lakes in northern Indiana. It can cause nuisance conditions. The plant is native to South American and is common in water gardens. This plant has a high potential for spread.

waterchestnut (*Trapa natans*) - Ball State may have a confirmed specimen in the herbarium collection from Tri-county Fish and Wildlife Area. This species has not caused any known problems in Indiana to date. However, this species has become a nuisance problem in some areas of the country, particularly in the northeast.

APPENDIX C: List of High Priority ANS in the Great Lakes basin.

The following list of high priority ANS was compiled by the Research Committee of the Great Lakes ANS Panel, based on the Great Lakes Aquatic Nonindigenous Species List compiled by the NOAA National Center for Research on Aquatic Invasive Species (NCRAIS) Great Lakes Environmental Research Laboratory with the assistance of the University of Michigan's Cooperative Institute for Limnology and Ecosystems Research, both in Ann Arbor, Michigan. (http://www.glerl.noaa.gov/res/Programs/invasive/). The list was presented in the document *ANS Research Priorities for the Great Lakes, Draft, July 2003*.

Grouping	Common Name	Taxon	Species	Origin	Date	Location	Mechanism
Fish	silver carp (Asian carp)	Cyprinidae	*Hypophthalmichthys molotrix*	Asia	???	???	Release (Aquaculture, Accidental)
	bighead carp (Asian carp)	Cyprinidae	*Hypophthalmichthys nobilis*	Asia	???	???	Release (Aquaculture, Accidental)
	black carp (Asian carp)	Cyprinidae	*Mylopharyngodon piceus*	Asia	???	???	???
	grass carp (Asian carp)	Cyprinidae	*Ctenopharyngodon idella*	Asia	???	???	Release (Deliberate)
	alewife	Clupeidae	*Alosa pseudoharengus*	Atlantic	1873	Lake Ontario	Canals, Release (Fishing)

	blueback herring	Clupeidae	*Alosa aestivalis*	Atlantic N. Amer.	1995	Unknown	Unknown
	chinook salmon	Salmonidae	*Oncorhynchus tshawytscha*	Pacific	1873	All Lakes but S	Release (Deliberate)
	coho salmon	Salmonidae	*Oncorhynchus kisutch*	Pacific	1933	Lake Erie	Release (Deliberate)
	common carp	Cyprinidae	*Cyprinus carpio*	Asia	1879	Widespread	Release (Deliberate)
	Eurasian ruffe	Percidae	*Gymnocephalus cernuus*	Eurasia	1986	St. Louis River (S)	Shipping (Ballast Water)
	fourspine stickleback	Gasterosteidae	*Apeltes quadracus*	Atlantic	1986	Thunder Bay (S)	Shipping (Ballast Water)
	rainbow trout	Salmonidae	*Oncorhynchus mykiss*	Pacific	1876	Lake Huron (T)	Release (Deliberate)
	round goby	Gobiidae	*Neogobius melanostomus*	Eurasia	1990	St. Clair River (StC)	Shipping (Ballast Water)
	rudd	Cyprinidae	*Scardinius erythrophthalmus*	Eurasia	1989	Lake Ontario	Release (Fishing)
	sea lamprey	Petromyzontidae	*Petromyzon marinus*	Atlantic	1830s	Lake Ontario	Canals, Shipping (Fouling)
	tubenose goby	Gobiidae	*Proterorhinus marmoratus*	Eurasia	1990	St. Clair River (StC)	Shipping (Ballast Water)
	white perch	Perichthyidae	*Morone americana*	Atlantic	1950	Cross Lake (O)	Canals
Zooplankton	amphipod	Amphipoda	*Echinogammarus ischnus*	Black Sea	1995	Unknown	Unknown
	cladoceran	Clodocera	*Bosmina maritima*	Eurasia	<1980	Unknown	Unknown
	cyclopoid copepod	Copepoda	*Megacyclops viridis*	Europe	1994	Unknown	Unknown
	fish-hook waterflea	Clodocera	*Cercopagis pengoi*	Black Sea	1998	Unknown	Unknown
	harpacticoid copepod	Copepoda	*Nitocra hibernica*	Eurasia	1973	Unknown	Unknown
	harpacticoid copepod	Copepoda	*Nitocra incerta*	Black Sea	1998	Unknown	Unknown
	harpacticoid copepod	Copepoda	*Heteropsyllus cf. nunni.*	Black Sea	1999	Unknown	Unknown
	harpacticoid copepod	Copepoda	*Schizopera borutzkyi*	Unknown	1990s	Unknown	Unknown
	spiny water flea	Cloderca	*Bythotrephes cederstroemi*	Eurasia	1984	Lake Huron	Shipping (Ballast Water)
Plants	curly pondweed	Potamogetonaceae	*Potamogeton crispus*	Eurasia	1879	Keuka Lake (O)	Release (Deliberate, Fishing)
	Eurasian watermilfoil	Haloragaceae	*Myriophyllum spicatum*	Eurasia	1952	Lake Erie	Release (Aquarium, Accidental)
	European frog-bit	Hydrocharitaceae	*Hydrocharis morsus-ranae*	Eurasia	1972	Lake Ontario	Release (Aquarium, Deliberate), Shipping (fouling)
	purple loosestrife	Lythraceae	*Lythrum salicaria*	Eurasia	1869	Ithaca, NY (O)	Canals, Shipping (Solid Ballast)
	water chestnut	Trapaceae	*Trapa natans*	Eurasia	<1959	Lake Ontario (T)	Release (Accidental, Aquarium)
Macroinvert.	digenean fluke	Digenea	*Neascus brevicaudatus*	Unknown	1992	Unknown	Unknown
	digenean fluke	Digenea	*Acanthostomum sp.*	Black Sea	1994	Unknown	Unknown
	digenean fluke	Digenea	*Ichthyocotylurus pileatus*	Eurasia	1980s	Unknown	Unknown
	mudsnail	Gastropoda	*Potamopyrgus antipodarum*	New Zealand	1991	Unknown	Unknown
	quagga mussel*	Dreissenidae	*Dreissena bugensis*	Eurasia	1991	Lake Ontario	Shipping (Ballast Water)
	zebra mussel	Dreissenidae	*Dreissena polymorpha*	Eurasia	1988	Lake St. Clair	Shipping (Ballast Water)
Other	parasite		*Heterosporus sp.*		???	???	???
	furunculosis	Bacteria	*Aeromonas salmonicida*	Unknown	<1902	Unknown	Release (Fish)
	mixosporidian	Myxozoa	*Sphaeromyxa sevastopoli*	Black Sea	1994	Unknown	Unknown
	salmonid whirling disease	Protozoa	*Myxobolus cerebralis*	Unknown	1968	Ohio (E)	Release (Fishing)
Nonindigenous	n/a	n/a	n/a	n/a	n/a	n/a	n/a

APPENDIX D: Regional and federal programs involved in ANS management.

Great Lakes Commission (GLC) and Great Lakes ANS Panel

Great Lakes regional coordination is addressed under Section 1203 of NANPCA, which first called upon the Great Lakes Commission to convene the Great Lakes Panel on Aquatic Nuisance Species in 1991. Panel membership is drawn from a wide range of federal, state, provincial and regional agencies, private sector user groups, Sea Grant programs and environmental organizations,

to ensure that the positions of the Panel provide a balanced and regional perspective on Great Lakes issues. The Panel's responsibilities for the Great Lakes region are fivefold: 1) identify Great Lakes priorities; 2) make recommendations to the national ANS Task Force; 3) assist the ANS Task Force in coordinating federal programs within the region; 4) advise public and private individuals on control efforts; and 5) submit annually a report to the ANS Task Force describing prevention, research, and control activities in the Great Lakes Basin.

The Great Lakes ANS Panel provided early leadership for developing state ANS management plans, including model guidance on plans and regulations. Six of the eight Great Lakes states (New York, Michigan, Ohio, Illinois, Wisconsin, and Minnesota) have or participate in federally approved plans. Indiana has had a state agency representative on the Great Lakes ANS Panel since its inception and is completing the process of developing a plan. In addition, Indiana state agencies have benefited from frequent communication and collaboration with the Illinois-Indiana Sea Grant offices in Illinois and at Purdue University.

Mississippi Interstate Cooperative Resource Association (MICRA)

The MICRA was established in 1991 to improve the conservation, development, management and utilization of interjurisdictional fishery resources (both recreational and commercial) in the Mississippi River Basin through improved coordination and communication among the responsible management entities. The Mississippi River Basin is the largest watershed in the nation, covering 1.25 million square miles, and draining 41% of the continental United States. Ninety-three of the Basin's rivers have been identified by the states as interjurisdictional waters, including the Ohio River and parts of the Wabash River in Indiana. The organization has recently decided to form a regional aquatic nuisance species panel (Mississippi River Basin Panel or MRBP) under the auspices of the federal task force and began meeting in July 2003. Twenty-eight states are located in the Mississippi River drainage, spanning from New York in the northeast to Montana in the northwest and Louisiana in the south. Members states include AL, AR, CO, GA, IL, IN, IA, KS, KY, LA, MN, MS, MO, MT, NE, NY, NC, ND, PA, OH, OK, SD, TN, TX, VA, WV, WI, and WY. Seven of these states (Illinois, Iowa, Minnesota, Montana, New York, Ohio, and Wisconsin) either have state or interjurisdictional plans approved by the ANS Task Force.

Ohio River Valley Water Sanitation Commission (ORSANCO)

The Ohio River Valley Water Sanitation Commission (ORSANCO) was established in 1948. Member states have cooperated to improve water quality in the Ohio River Basin so that the river and its tributaries can be used from drinking water, industrial supplies, recreational purposes, and can support a healthy and diverse aquatic community. ORSANCO operates monitoring programs to check for pollutants and toxins that may interfere with specific uses of the river, and conducts special studies to address emerging water quality issues. Exotic species have not been a primary focus of ORSANCO, but a representative will participate on the MRBP on ANS. Member states in ORSANCO include: Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia. Three of these eight states have federally approved ANS plans.

Fish Health Committee, Great Lakes Fishery Commission (GLFC)

Established in 1973 under Article VI of the Great Lakes Fishery Commission Convention between the United States and Canada (1955), the Great Lakes Fish Health Committee serves as the instrument of the Commission in coordinating regional efforts in the Great Lakes basin to prevent introduction and dissemination of communicable fish diseases. The Committee consists of two representatives appointed by each agency formally cooperating with the Great Lakes Fishery Commission. Generally, the Indiana representatives include the state fish hatchery supervisor for IDNR and a state hatchery manager knowledgeable in technical management of fish health.

U.S. EPA Great Lakes National Program Office (GLNPO)

The U.S. Environmental Protection Agency's Great Lakes National Program Office (GLNPO) provided $2.9 million in Fiscal Year 2002 funding, including $300,000 earmarked for invasive species issues. GLNPO provided assistance to address invasive (non-indigenous) aquatic and terrestrial species in the Great Lakes Basin with an emphasis on prevention. The highest priority was given to proposals in three topic areas: 1) development and demonstration of strong and innovative programs (education and outreach, new technology, or biological) to prevent the introduction of new invasive species (aquatic or terrestrial) into the Great Lakes Basin; 2) development and demonstration of strong and innovative programs to control the spread of invasive species within and from the Great Lakes Basin; and 3) projects that allow for the prediction of new invaders into the Great Lakes Basin and the development of contingency plans to address these potential invaders. The program also funded development of an early detection and rapid response model program through actions of the Great Lakes ANS Panel.

Stop Aquatic Hitchhikers Campaign and Protect Your Waters Website

The "Stop Aquatic Hitchhikers!" campaign and www.protectyourwaters.net web site empower recreational users to become part of the solution in stopping the transport and spread of these harmful hitchhikers. The national Aquatic Nuisance Species (ANS) Task

Force, the U.S. Fish and Wildlife Service and the U.S. Coast Guard are the primary sponsors of this campaign. The website has links to news updates, provides an email notification service for emerging issues and news, and contact information for ANS publications and brochures. Campaign sponsors will use a variety of means, such as public service announcements, stickers, posters, magazine and newspaper articles, television and radio programs to make the public aware of this issue. Most material and announcements will include this web site address to direct individuals to visit and learn about how they can become part of the solution. Individuals and clubs/organizations are being called upon to spread the message. Support materials will be available to help those who want to get involved. News is disseminated to the press and available to the public and press through the web site. Media interested in running public service ads can contact the webmaster, and the campaign sponsors will provide appropriate formats.

Department of Homeland Security

On November 25, 2002, Public Law 107-296 was passed to create a new US Department of Homeland Security. DHS is responsible for assessing the vulnerabilities of the nation's critical infrastructure and cyber security threats and will take the lead in evaluating these vulnerabilities and coordinating with other federal, state, local, and private entities to ensure the most effective response. These threats may include the introduction of invasive species as a means of bioterrorism. According to the DSH, more than 500 million people are admitted into the United States annually, of which 330 million are non-citizens. On land, 11.2 million trucks and 2.2 million rail cars cross into the United States, while 7,500 foreign-flag ships make 51,000 calls in U.S. ports annually. In 2003, the Bush Administration proposed an increase of $2.2 billion from the previous year's budget for border security. This additional funding would allow border agencies to begin implementing a seamless air, land, and sea border that protects the United States against foreign threats while moving legitimate goods and people into and out of the country. Border patrols for invasive species of plants, animals, and diseases include the USDA's Animal and Plant Health Inspection Service (APHIS) and the Department of Transportation's Coast Guard, which prevent and control some of the most harmful invasive species through monitoring of pests in shipments and invasive species in ballast water of oceangoing vessels. These programs, among others, were transferred to the new DHS.

Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW)

The FICMNEW was established through a memorandum of understanding between 16 federal agencies with invasive plant management and regulatory responsibilities. During monthly meetings, also attended by staff of the National Invasive Species Council, the committee coordinates information on the identification and extent of invasive plants and coordinates federal agency management of the species. The committee shares scientifica and technical information, fosters collaborative efforts among federal agencies, and sponsors technical and education conferences and workshops regarding invasive plants.

USDA Agricultural Research Service (ARS)

Projects related to ANS include: development and testing of user-friendly data entry systems for importation of foreign invertebrates and microbial biological control agents of invertebrate, weed, and microbial pests; development of cost-effective information management systems to compile connections to the Federal Departments and agencies responsible for the exclusion, early detection and eradication, and long-term management of invasive species and rehabilitation of affected areas; testing of behavior-modifying chemicals and biocontrol agents to disrupt reproduction and spread of invasive species.

USFWS Branch of Invasive Species

The Service's Fisheries Program, through its Division of Environmental Quality, supports the implementation of these Acts and the Executive Order through its Invasive Species Program. This program provides national leadership preventing, eradicating, and controlling invasive species. The program provides funding for ANS Task Force personnel and numerous Task Force activities. It also funds seven FWS regional coordinators and their respective invasive species activities. These coordinators work closely with the public and private sector to develop and implement invasive species activities. Many of the Service's fishery resources offices also provide support for invasive species activities. The National Invasive Species Act (NISA) was passed in 1996 amending the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. The 1990 Act established the Aquatic Nuisance Species (ANS) Task Force to direct ANS activities annually. The Task Force is co-chaired by the U.S. Fish and Wildlife Service (Service) and the National Oceanic and Atmospheric Administration. Other members include the National Marine Fisheries Service, Environmental Protection Agency, Department of Agriculture, the U.S. Coast Guard, the U.S. State Department, and the Army Corps of Engineers. NISA furthered ANS activities by calling for ballast water regulations, the development of State management plans and regional panels to combat the spread of ANS, and additional ANS research. The Lacey Act was passed in 1900 and has since been amended to restrict import, export, and interstate transport of injurious fish and wildlife. Wildlife are considered injurious if importing them could impact negatively on agriculture, horticulture, forestry, the health and welfare of humans, and the welfare and survival of wildlife and wildlife resources in the nation. The USFWS also provides assistance for controlling ANS on federal lands,

including 93 million acres of wildlife refuges and 25 million acres controlled by the Department of Defense.

USFWS Habitat Conservation Programs

The North American Waterfowl Management Plan (NAWMP) and other habitat improvement programs provide funds for invasive species control on lands managed for wildlife habitat in Indiana. By 1985, approximately 3.2 million people were spending nearly $1 billion annually to hunt waterfowl. By 1985, interest in waterfowl and other migratory birds had grown in other arenas as well. About 18.6 million people observed, photographed, and otherwise appreciated waterfowl and spent $2 billion for the pleasure of doing it. As of the end of 2001, Plan partners have invested more than $1.7 billion to protect, restore, and/or enhance more than 5 million acres of habitat. These wetland habitats and associated recreational uses may be threatened by invasion of exotics such as purple loosestrife, reed canary grass, and common reed.

Aquatic Ecosystem Restoration Foundation (AERF)

The Aquatic Ecosystem Restoration Foundation (AERF) in Lansing, Michigan, is a nonprofit, tax-exempt corporation created to conduct and support applied research in the management of aquatic pest species, with a focus on nuisance vegetation. The AERF supports research for the control of aquatic weed species and exotic plants such as Eurasian watermilfoil, hydrilla, water hyacinth, purple loosestrife, and other aquatic weeds found in lakes, ponds, reservoirs, rivers and streams.

Center for Aquatic Plant Research and Technology, US Army Corps of Engineers (CAPRT)

The CAPRT was established on 9 August 1993 (Permanent Order 8-1) and is assigned to the Environmental Laboratory located at the Waterways Experiment Station, Vicksburg, Mississippi. The CAPRT provides a single point of contact for coordination and facilitation for all aquatic plant research and resulting technology transfer to federal and state agencies, universities, and other users. Activities include: technical assistance, direct allotted R&D, technology transfer, workshops and seminars, work for others technical, guidance documents, general information requests, and coordination with special interest groups and organizations.

Invasive Species Program, U.S. Geological Survey (USGS)

The USGS plays an important role in Federal efforts to combat invasive species in natural and semi-natural areas through early detection and assessment of newly established invaders, monitoring of invading populations, improving understanding of the ecology of invaders and factors in the resistance of habitats to invasion, and development and testing of prevention, management and control methods. USGS research on invasive species includes all significant groups of invasive organisms in terrestrial and aquatic ecosystems. The Nonindigenous Plants and Animals Program tracks the status and distribution of introduced aquatic organisms and provides this information in a timely manner for research, management and education. There are two programs at the Gainesville Center that compliment each other. The nonindigenous fishes program conducts field and laboratory studies. The Nonindigenous Aquatic Species program is developing a database on all nonindigenous aquatic species and maintains one of the most comprehensive websites on invasive species distributions and descriptions.

APPENDIX E: Annotated listing of Indiana ANS regulations

General powers of the department (IC 14-11-1-1)

Generally authorizes the department to conduct surveys, investgate, compile, and make recommendations concerning the natural resources of Indiana.

Administration: Indiana Department of Natural Resources

Enforcement powers (IC 14-11-1-6)

The department shall recommend and secure the enforcement of laws for the conservation and development of natural resources in Indiana.

Administration: Indiana Department of Natural Resources

Definitions of private waters (IC 14-22-9-5(b))

As used in the fish and wildlife code regarding the capture and transport of baitfish outside of Indiana, “private waters” means water wholly on the land of an individual that is not connected with public waters and will not allow the ingress of fish.

Administration: IDNR Division of Fish and Wildlife

Definitions of pests, pathogens, and weeds

For the purposes of IC 14-24, pest or pathogen organisms of listed taxa that may be injurious to nursery stock, agricultural crops, other vegetation, or bees are defined in IC 14-8-2-203. An exotic weed is defined in IC 14-8-2-87.5 as a weed that is not native to Indiana. Weeds are defined in IC 14-8-2-316 as any plant that is competitive, persistent, pernicious, and interferes with human activity, and as a result is undesirable.

Taxa: pests or pathogens include the arthropods, nematodes, microorganisms, fungus, parasitic plants, mollusks, plant diseases, or exotic weeds that are injurious to plants or bees
Uses: control of pests, pathogens, and weeds
Administration: IDNR Division of Entomology and Plant Pathology

Powers regarding pests or pathogens (IC 14-24-2-1)

The division director may cooperate with a person in Indiana to locate, check, or eradicate a pest or pathogen.

Administration: IDNR Division of Entomology and Plant Pathology

Cooperation with federal government or other states (IC 14-24-2-2)

The division director may, on behalf of the department, enter into a cooperative agreement with the United States government, an Agency of the United States, or a state government or state agency.

Administration: IDNR Division of Entomology and Plant Pathology

Emergency action (IC 14-24-2-5)

The division director has authority to order treatment of a pest or pathogen, or prevent the movement or require the destruction of pest or pathogen that may pose an environmental, health, or economic hazard to Indiana.

Administration: IDNR Division of Entomology and Plant Pathology

Rulemaking authority (IC 14-24-3)

The natural resources commission has authority to adopt rules to control pests or pathogens establish fees, declare species or subspecies to be pests or pathogens, and to establish quarantines.

Administration: Natural Resources Commission

Control of pests or pathogens (IC 14-24-4)

The division may inspect any site in Indiana where agricultural, horticultural, or sylvan products are grown, shipped, sold, or stored to determine if a pest or pathogen is present. The division may declare all or part of a township infested. All farms and premises located in an infested area must conform to standards of operation approved by the commission, including the destruction or treatment of infested material. The department may add costs incurred for non-compliance to the owner's tax bill.

Administration: IDNR Division of Entomology and Plant Pathology

Duties regarding imported nursery stock (IC 14-24-5-5)

A person receiving nursery stock from a foreign origin must hold the material unopened until it is inspected or released.

Administration: IDNR Division of Entomology and Plant Pathology

Control of pests or pathogens (312 IAC 18-3)

Provides specific regulatory authority over a pest or pathogen even if not associated with a plant. Includes survey and eradication activities, permits for movement, containment criteria, post entry requirements, honeybee issues, and various pests or pathogens.

Administration: IDNR Division of Entomology and Plant Pathology

Trade secrets (312 IAC 18-6)

Provides for the protection of trade secrets within the permitting system, particularly in reference to culture and use of genetically modified organisms or biocontrols.

Administration: IDNR Division of Entomology and Plant Pathology

Beneficial organism defined (312 IAC 18-1)

Administration: IDNR Division of Entomology and Plant Pathology

Infested areas and quarantines (312 IAC 18-2)

Includes procedures for declaring and managing infested areas and quarantine principles.

Administration: IDNR Division of Entomology and Plant Pathology

Interstate agreements on boundary waters (IC 14-22-10-9)

Provides for the state of Indiana to enter into an interstate agreement on boundary waters for the purpose of better protection of wild animals in the water.

Taxa: wild animals in boundary waters
Uses: interstate agreements for better protection
Administration: IDNR Division of Fish and Wildlife

Entry onto property (IC 14-22-2-1; IC 14-22-2-5)

Allows the director of the division of fish and wildlife or representative to enter into or upon private or public property for the purpose of killing or removing a wild animal that is considered a nuisance or detrimental to overall populations. The definition of "public or private property" does not include "barns, dwellings, or other buildings."

Administration: IDNR Division of Fish and Wildlife

Search of effects; entry onto property (IC 14-22-39-3)

The director and conservation officers may:
(1) search a boat, a conveyance, a vehicle, an automobile, a fish box, a fish basket, a game bag, a game coat, or other receptacle in which game may be carried; and
(2) enter into or upon private or public property for the purposes of patrolling or investigating;
if the director or conservation officer has good reason to believe evidence of a violation of a law for the propagation or protection of fish, frogs, mussels, game, furbearing mammals, or birds will be obtained. Dwellings are not subject to this search authority and require a warrant to investigate gear or illegal possession of wild animals.

Taxa: fish, frogs, mussels, game, forbearing mammals, birds
Uses: determination of violations of fish and game laws
Exempts: dwellings
Administration: IDNR Division of Law Enforcement

Liability for destruction of wild animals by pollutant (IC 14-22-10-6)

Any person either accidentally or intentionally releases waste materials, chemicals, or other substances that result in death of fish or wildlife

is liable for the damages. The department and attorney general shall recover damages by reaching a settlement with the person.

Taxa: fish and wildlife
Uses: recovery of damages associated with release of a fatally toxic substance
Administration: IDNR Division of Fish and Wildlife

Sale of fish (IC 14-22-9-7 and 312 IAC 9-10-2)

Approval from the department is required for importation and sale of any live species of fish. It is not legal to offer or actually sell, barter or exchange, or purchase any fish protected by law, whether taken in Indiana, the boundary waters of Indian, or taken in some other state and brought into Indiana, except as otherwise provided. Restaurants, hotels and similar facilities may prepare and serve fish to patrons and their families if the fish was lawfully taken in open season. The provisions do not apply to the sale of fish produced in private ponds, providing that the owner has an applicable permit from the department. The sale of packaged fish and parts must be prepared subject to regulations of the department of natural resources and health agencies and be accompanied by a tag or label indicating that the fish was legally acquired and a dated bill of lading.

Taxa: fish
Uses: sale of live or processed fish
Exempts: properly labeled hatchery reared fish or fish legally acquired from other states
Administration: IDNR Division of Fish and Wildlife

Transportation of fish and game outside the state (IC 14-22-10-3)

A person can only legally transport a wild animal protected by state law outside of the state if the animal is legally possessed under an Indiana breeder's permit, license to fish, trap or hunt, or commercial fishing license. The wild animal shipment must be enclosed in a package on which there is clearly, legibly, and conspicuously marked information regarding the ownership, number, and kind of animals contained. Both the license and animal must be made openly available for inspection.

Taxa: all fish and game
Uses: transport of fish and game outside the state of Indiana
Administration: IDNR Division of Fish and Wildlife

Transportation of wild minnows, crayfish or gamefish beyond limits of state (IC 14-22-9-5)

Unless the animals have been commercially raised in private waters, an individual may not transport more than one hundred (100) minnows or one hundred (100) crayfish to other states from Indiana in a twenty-four (24) hour period.

Taxa: minnows, crayfish, sport fish
Uses: transport outside of state of Indiana
Exempts: production of fish or crayfish in private waters
Administration: IDNR Division of Fish and Wildlife

Importation statute (IC 14-22-25)

Requires an importation permit to bring into Indiana, for the purpose of release or selling for release in Indiana, live fish, the fry of live fish, or any other living wild animal. Permits are granted for importation only upon satisfactory proof that the specific animals intended to be imported meet the following conditions: animals are free of a communicable disease at time of importation; that the animals will not become a nuisance; the animals will not cause damage to a native wild or domestic species. Import permits not needed for animals being imported into Indiana for the purpose of being confined and exhibited in a zoo or other public display of animals.

Taxa: live fish, fry of live fish or any other wild animal
Uses: for release or sale for release
Exempts: animals confined and exhibited in a zoo or other public display of animals.
other animals that the department designates.
Administration: IDNR Division of Fish and Wildlife

Wild animal importation permit (312 IAC 9-10-20)

Requires a wild animal importation permit before importing a mammal, reptile, amphibian, mollusk, or crustacean for release or sale for release in Indiana. Application must be made not less than 10 days in advanced of proposed importation and be accompanied by the appropriate fee for each species or release site. Have to be able to show that species will not become a nuisance, and will not damage a native wild animal, domesticated species, or animal or a species of plant. A permit is not needed to ship through Indiana, or for a zoo, carnival, menagerie, animal dealer, pet shop, circus, or nature center licensed under 9 CFR, Chapter 1, Subchapter A, Parts I through IV or following import into Indiana for confinement and exhibit in a zoo or other public display.

Taxa:	mammal, bird, reptile, amphibian, mollusk, crustacean
Uses:	for release or sale for release
Exempts:	during interstate shipment through Indiana.
	zoo, carnival, menagerie, animal dealer, pet shop, circus, or nature center licensed under 9 CFR, Chapter 1, Subchapter A, Parts I through IV.
	confinement and exhibit in a zoo or other public display.
Administration:	IDNR Division of Fish and Wildlife

Fish importation permit (312 IAC 9-10-15)

Assists in administration of the requirements relative to fish importation. Section 15(e) provides a "clean list" of fish species allowed without restriction. Genetically altered fish are not allowed under the clean list. Imported fish must be free of communicable diseases, not become a nuisance, and not damage a native wild species or domestic species of animal or plant.

Taxa:	fish
Uses:	importation of live fish for sale or release
Exempts:	confinement and exhibit in a zoo or public display
	aquarium pet trade
Conditions:	free of communicable disease
	not become a nuisance
	not damage a native wild species or domestic species of animal or plant
Administration:	IDNR Division of Fish and Wildlife

Fish haulers and suppliers permit (312 IAC 9-10-17)

A Haulers and Suppliers Permit or an Aquaculture Permit is required to transport fish for release or sale for release. A list of automatically approved species is provided in the Haulers and Suppliers rule. The Aquaculture Permit is used for controlled species that carry a higher risk and require special conditions for use.

Taxa:	includes the "clean list" in Sect 15(e) and adds five species
Uses:	imports live fish from another state or country for sale
	produces live fish for sale
Exempts:	aquarium pet trade
	holders of a bait dealers license
	conditions: fish health certification is required as a condition of the permit for trout and salmon
Administration:	IDNR Division of Fish and Wildlife

Aquaculture permit (312 IAC 9-10-17)

The Aquaculture Permit controls fish species not explicitly allowed under the Haulers and Suppliers Permit as listed in 312 IAC 9-10-14(d) and 312 IAC 9-10-15(e). The permit is primarily used for regulation of grass carp and for research use of fish species that would otherwise be illegal for live possession under 312 IAC 9-6-7. The department may require a description or investigation of the production facility prior to approval of an aquaculture permit (312 IAC 9-10-17). A definition for a closed aquaculture system in 312 IAC 9-6-1(25) as a rearing facility designed to prevent the escape of cultured organisms to the wild. All diploid grass carp must be held in a closed aquaculture system according to 312 IAC 9-10-17(e)(4). The requirement may be applied as needed to other cultured species. Detailed quarterly reports of the number sold and stocking location of triploid grass carp are required for use of this fish in private ponds. Similar information or a prohibition against release in public or private waters may be required for sales

of other controlled fish species under an Aquaculture Permit.

Taxa: any species not included on the "clean list" in Sect 15(e)
Uses: imports, raises, sells or transports fish
Exempts: confinement and exhibit in a zoo or public display
aquarium pet trade
Conditions: fish health certification is required for trout and salmon
quarterly sales reports required for grass carp
genetic certification required for triploid grass carp through USFWS
permit holder must deliver and stock grass carp
Administration: IDNR Division of Fish and Wildlife

Bait dealers statute (IC 14-22-16 and IC 14-8-2-167)

Live minnows and crayfish may be sold as live bait under a Bait Dealers License. Minnows are defined in IC 14-8-2-167 as including all of the fish of the minnow family (Cyprinidae) and the young of all species of fish that are not protected by law.

Taxa: possession of over 500 live minnows or crayfish
Uses: taking, catching, selling, or bartering species for bait
Exempts: minnows, crayfish, or gamefish commercially raised in private waters for sale
Administration: IDNR Division of Fish and Wildlife

Fish stocking permit (IC 14-22-9-8 and 312 IAC 9-10-8)

Live fish cannot be transferred between or released live into state waters without a stocking permit. The department may issue to a person a permit to stock fish in waters containing state-owned fish, waters of the state or boundary waters of the state. In instances where stocking of grass carp has been allowed in public waters, all fish were required to be reproductively sterile (i.e., triploid). Fish stocking by the department of natural resources and review of private permits for stocking have been guided by a nonrule policy adopted in 1999.

Taxa: fish
Uses: release in public water
Exempts: stocking by the department
Administration: IDNR Division of Fish and Wildlife

Disposal of fish parts and wanton waste (IC 14-22-9-6 and 312 IAC 9-6-3)

Dead fish and associated diseases or parasites cannot be returned to the water in whole or part for any reason other than legal use as bait.

Taxa: fish
Uses: disposal of carcasses in public water
Administration: IDNR Division of Fish and Wildlife

Threatened and endangered species (IC 14-22-34 and 312 IAC 9-5-4)

A person cannot take, possess, transport, export, process, sell, or offer for sale or shipment nongame species on the state endangered species list under IC 14-22-34-9. The department may enter into agreements with federal agencies, political subdivisions or private individuals for the purpose of managing an area used by endangered species under IC 14-22-34-14.

Taxa: threatened and endangered nongame species of mammals, reptiles and amphibians, fish
Uses: possession of endangered species; agreements to manage habitat
Administration: IDNR Division of Fish and Wildlife

Wild animal possession permits (312 IAC 9-11)

Provides for a permit to possess animals protected under fish and wildlife codes but not legally acquired under other permits. The

animal must be free of disease, confined in a proper enclosure, and have a plan for the safe recapture or destruction of an escaped animal. Requirements for confining potential aquatic nuisance species (i.e., venomous reptiles and crocodilians over five feet in length) are listed in 312 IAC 9-11-13.5.

Taxa: wildlife not covered by other permits
Uses: possession
Exempt: zoos, carnivals, menageries, circuses, pet shops, animal dealers, nature centers
Administration: IDNR Division of Fish and Wildlife

Possession, sale and transport of dangerous reptiles (312 IAC 9-5-8)

Prohibits possession, sale, and transport of dangerous reptiles, including crocodilians over five feet in length unless otherwise exempted.
Taxa: dangerous reptiles
Uses: possession, sale, transport
Exempt: specimens transported through Indiana for interstate commerce to out-of-state destinations
possession under a Class III Wild Animal Permit (312 IAC 9-11) or by a zoo
Administration: IDNR Division of Fish and Wildlife

Mussels permit (IC 14-22-17)

Commercial and personal harvest of mussels has been closed since 1993. No license under IC 14-22-17-3(1) or IC 14-22-17-3(3) shall be issued to take, ship, sell, buy, or export mussels or mussel shells for personal or commercial use.

Taxa: mussels or mussel shells
Uses: take, ship, sell or offer to sell, buy or offer to buy, or export mussels or mussel shells taken from the water of the state
Administration: IDNR Division of Fish and Wildlife

Illegal fish possession (312 IAC 9-6-7)

Prohibits importation, possession, or release into public or private waters of specified live fish. As of December 1, 2002, an emergency rule was enacted to prohibit use of exotic catfish (Clariidae), bighead carp (*Hypophthalmichthys nobilis*), black carp (*Mylopharyngodon piceus*), silver carp (*Hypophthalmichtys molitrix*), white perch (*Morone americana*), snakehead fish (Channidae), rudd (*Scardinius erythrophthalmus*), ruffe (*Gymnocephalus cernuus*), round goby (*Neogobius melanostomus*) or tubenose goby (*Proterorhinus marmoratus*). An aquaculture permit may be provided for medical, educational or scientific research purposes. The Natural Resources Commission adopted a permanent rule to cover these species in 2003.

Taxa: live walking catfish, round goby, rudd, tubnose goby, ruffe, bighead carp, black carp, silver carp, white perch, snakehead fish or hybrids thereof.
Uses: import, possess, propagate, buy, sell, barter, trade, transfer, loan or release into public or private waters
Exempts: holders of an aquaculture permit for medical, educational, or scientific research
properly accredited zoological park as defined in 312 IAC 9-6-8(i)
during interstate shipment
conditions: must comply with federally listed injurious species in Lacey Act (18 USC 42) and 50 CFR 16
Administration: IDNR Division of Fish and Wildlife

Mussel possession and illegal species (IC 14-22-17-3 and 312 IAC 9-9-3)

Prohibits importation, possession, or release into public or private waters, a live zebra mussel, quagga mussel (*Dreissena* sp.), or Asiatic clam (*Corbicula* sp.).

Taxa: listed exotic mussel species
Uses: import, possess, or release into public or private waters
Exempts: holder of a permit issued under 312 IAC 9-10-6.
Administration: IDNR Division of Fish and Wildlife

Illegal uses of exotic fish (312 IAC 9-6-8)

Goldfish (*Carassius auratus*) can be used as live bait. Carp (*Cyprinus carpio*) and gizzard shad (*Dorosoma cepedianum*) cannot be used as live bait in most waters. Gizzard shad are allowed as live bait in one lake. Minnows 'should not' be released into the water after fishing.

Taxa: carp, gizzard shad
Uses: not permitted as live bait
Exempts: use of live gizzard shad at Brookville Reservoir
Administration: IDNR Division of Fish and Wildlife

Scientific purposes license (IC 14-22-22 and 312 IAC 9-10-6)

A Scientific Purposes license is required to collect fish or wildlife from public waters for purposes of medical, educational or scientific research. Annual reports of the collection methods, location, species, number, and disposition of specimens are required of license holders.

Taxa: wild birds, nests or eggs of wild birds, other wild animals
Uses: taken from public waters for scientific purposes
Conditions: annual report of the collection by species, number, and location
Administration: IDNR Division of Fish and Wildlife

Nuisance wild animal control permit (312 IAC 9-10-11)

A Nuisance Wildlife Permit is required for use of any methods that would otherwise be illegal under fish and game laws to remove wildlife that are causing damage or threatening property, or health and safety of humans or domestic animals. Handling and disposition of animals is proscribed, along with annual reports. An examination is required prior to licensing.

Taxa: nuisance wildlife
Uses: control of wildlife damaging property or health and safety of humans or domestic animals
Conditions: proper handling, disposal or release
Administration: IDNR Division of Fish and Wildlife

Aquatic plant control permit (IC 14-22-9-10; 312 IAC 9-10-3)

An Aquatic Plant Control Permit is required for use of chemical, physical, biological or mechanical methods to control plants in public waters, including nuisance exotic species. Most aquatic plant control permits are issued for chemical control of the exotic invasive plants Eurasian watermilfoil and Curly leafed pondweed. Permits have been issued at a few lakes for use of the watermilfoil biocontrol weevil (*Euhrychiopsis lecontei*). *Administrative rule amendments are in process for 2004.*

Taxa: aquatic plants in specified state waters
Uses: control of plants, including exotics, by use of physical, mechanical, chemical, or biological means
Exempts: privately owned lake, farm pond, public or private drainage ditch, riparian owners treating less than 625 square feet
Conditions: *provide information on the application to accommodate the additional regulation of physical, mechanical, and biological methods*
requires information on dominant plants in proposed treatment area
requires reporting of date, location, and method of treatment
Administration: IDNR Division of Fish and Wildlife

Water pollution control (IC 13-18-4)

State water quality standards prohibit activities that impair aquatic communities and uses of waters. Destruction of protected qualities and properties of water is prohibited, including effects on public health, lawful uses of water, agricultural, floricultural or horticultural uses, watering of livestock or other domestic animals, and production or life of fish or beneficial animals or plants in the water. It is unlawful to discharge any organic or inorganic matter that causes a polluted condition of state waters.

Taxa: negative effects on physical, biological, or chemical quality of water

Uses: pollution control and prevention of loss of beneficial water uses
Administration: Indiana Department of Environmental Management

Pesticide control (IC 15-3-3.5 and IC 15-3-3.6)

Pesticides used to control invasive species must be registered with the office of the Indiana state chemist, used according to label directions, and legally applied by a competent and/or certified applicator.

Taxa: all organisms
Uses: pest control
Administration: Office of the Indiana State Chemist

Control of diseases (IC 15-2.1-1-1)

Promotes and encourages the prevention, suppression, control and eradication of infectious, contagious and communicable diseases affecting the health of domestic or wild animals within Indiana and trade in animals and animal products in and from Indiana. Domestic animals include "an aquatic animal that may be the subject of aquaculture (as defined in IC 4-4-3.8-1)." Aquatic animals are specifically excluded from the definition of "livestock" in IC 15-2.1-2-27.

Taxa: animals and animal products
Uses: commercial trade
Administration: Board of Animal Health

Proclamation against importation of certain animals (IC 15-2.1-18-13)

Whenever the governor has good reason to believe that any disease has become epidemic in another state and that the importation of animals or products derived from animals from that state would be injurious to the health of the citizens or the animals of this state, the governor may, on the recommendation of the board, designate such locality by proclamation and prohibit the entry or stipulate the conditions under which animals and products derived from animals of the type diseased or animals exposed to the disease may enter the state.

Taxa: animals and animal products
Uses: importation from areas with epidemic diseases
Administration: Board of Animal Health

Aquaculture (IC 4-4-3.8)

Defines aquaculture as the "controlled cultivation and harvest of aquatic plants and animals" and requires the commissioner of agriculture to: (1) organize and develop an information and market research center for aquaculture; (2) instigate the formation of a market and development plan for the aquaculture industry; and (3) encourage the development and growth of aquaculture.

Taxa: aquatic plants and animals
Uses: controlled cultivation and harvest
Administration: Commissioner of Agriculture

Protection and improvement of public health (IC 16-19-3-4)

The state department of health is responsible for detection, reporting, prevention, and control of diseases that affect public health, regulation of the pollution of any water supply other than where jurisdiction is in the water pollution control board and department of environmental management, and the production, distribution and sale of human food, including consumption of fish.

Taxa: human pathogens
Uses: diseases that affect public health; water supplies not regulated by other agencies
Administration: Indiana State Department of Health

APPENDIX F: IMPLEMENTATION TABLE

Based upon strategic actions prioritized through public review and oversight from the Indiana Department of Natural Resources, the implementation table lists all top priority goals, tasks, and subtasks with information identifying the primary and cooperating agencies, expenditures over the past two years, and funding or staffing needs over the next five years.

The implementation table summarizes the plan's funding from all sources. Existing funds that are dedicated to ANS related tasks total $3.121 million per year. Total program costs for FY03 are estimated to be $4,134,400. Of this amount, funding of $589,100 annually must come from new sources for the first phase of ANS program implementation (actions: I.A.1; I.B.1; I.B.2; I.B.3; I.C.1.a; I.D.1.a; I.D.1.c; I.D.2; I.D.2.a; I.D.2.b; I.E.1.a; I.E.1.c; I.E.1.d; II.B.1; II.E.1.d; V.A.1.a; V.A.2.a; V.C.1; V.C.1.b; V.C.1.c; V.C.2.e). For these activities, the state of Indiana requests $441,825 from the Federal ANS Task Force as a 75 percent federal cost-share. State programs will contribute $147,275 annually for the next five years as a 25 percent cost-share from eligible state government sources. The residual of the program costs will be covered by other federal monies and funds that cannot be used as state cost share.

Plan #	Strategic Actions / Tasks				Recent Efforts ($)		Planned efforts ($)				
	Descriptive Title	Funding Source	Impl. Entity	Coop. Entity	FY01	FY02	FY03	FY04	FY05	FY06	FY07
I.	**COORDINATION**										
I.A.	**Develop an integrated management plan**										
I.A.1.	Develop content and maintain a statewide internet web site	DNR	DNR	TNC, AC		$5,000	$10,000	$7,000	$7,000	$7,000	$7,000
I.A.2.	Prioritize activities and adhere to timelines	DNR	DNR	AC		see 1.D.1.a.					
I.A.3.	Prioritize enforcement actions	DNR	LE	DFW		see 2.B.1.a.					
I.B.	**Integrate the state plan with regional initiatives**										
I.B.1.	Influence regional and national policies	DNR	DFW	GLC	$3,600	$3,600	$3,600	$3,600	$3,600	$3,600	$3,600
I.B.2.	Participate in regional activities of the Great Lakes basin (semi-annual meetings)	DNR	DFW	GLC, TNC	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500
I.B.3.	Participate in regional activities of the Mississippi River basin (semi-annual meetings)	DNR	DFW	MICRA, MRBP, GLC	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000
I.C.	**Develop a baseline understanding of ANS issues by the public**										
I.C.1.	Understand and influence public perception	DNR	DFW, DEP, DNP	AC			see 1.C.1.b-d				
I.C.1.a	Survey public opinion	DNR	DFW	AC			$45,000				
I.C.1.b	Inform the public about risks and responsibilities (outreach program development)	DNR	DNR	IDEM				$55,000	$5,000	$5,000	$5,000
I.C.1.c	Develop a common language	DNR	DNR	AC				see 1.C.1.b.			
I.C.1.d	Establish relationships with various sectors (targeted outreach effort)	DNR	DFW, DEP, DNP	IAA, AC				$4,000	$4,000	$4,000	$4,000
I.C.2.	Provide the public with current information	DNR	DFW, DEP, DNP	AC, ILMS, IAA, BASS				see 1.C.1.c.			
I.C.2.a.	Explain the criteria that define harmful exotics	DNR	DNR	IAA, AC				see 1.C.1.c.			
I.C.2.b.	Develop and maintain a publicly-accessible ANS "alert system"	DNR	DFW	AC					$5,000	$500	$500
I.C.2.c.	Invasive species in statewide conservation initiatives	IBI, DFW	IBI, DFW	private lands	see 5.C.2.						
I.C.2.d.	Use primary contact points for educating water users	DNR	DNR	InDOT				see 1.C.1.c.			
I.D.	**Build institutional capacity to implement the plan**										
I.D.1.	Institute a state program on ANS management (0.5 FTE)	DFW, SFR	DFW	AC	$18,223	$43,223	$20,000	$20,000	$20,000	$20,000	$20,000
I.D.1.a.	Hire a full time coordinator and staff (2 FTEs)	DFW, SFR, FWS	DFW				$100,000	$100,000	$100,000	$100,000	$100,000
I.D.1.b.	Create a central clearinghouse						see 1.D.2.				
I.D.1.c.	Support a statewide interagency task force (monthly meetings)	DNR	DEP	AC			$50,000	$50,000	$50,000	$50,000	$50,000
I.D.2.	Build capacity within organizations	DNR, FWS, LARE	DFW	AC, ILMS			$4,000	$4,000	$4,000	$4,000	$4,000

I.D.2.a.	Provide public information forum (annual meeting, workshop or conference)	DNR, FWS, SFR, LARE	DFW	AC, ILMS			$10,000	$10,000	$10,000	$10,000	$10,000
I.D.2.b.	Involve citizens in education and management processes (newsletters)	TELWF, ILMS, CLP	TELWF, ILMS, CLP	lake associations	$30,550	$30,550	$35,000	$35,000	$35,000	$35,000	$35,000
I.E.	**Generate baseline funding to implement the plan**										
I.E.1.	Determine cost-effective principles and priorities for funding	DFW, SFR, FWS	DFW	DNP, DEP				$10,000			
I.E.1.a.	Develop tools to assess economic impact	DFW, SFR, FWS	DFW	DNP, DEP			$45,000				
I.E.1.b.	Recognize that areas with a budget have intact natural communities (TNC: $5,000 annually for habitat plans)	DNP, DFW, SFR, private funds	DNP	DSPR, TNC, private waters	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
I.E.1.c.	Early response to initial infestations (semi-annual meetings)	DFW, SFR, FWS	DFW	private waters, contractors			$7,000	$7,000	$7,000	$7,000	$7,000
I.E.1.d.	Funding for emergency actions (10 days annually)	DFW, SFR, FWS	DFW	private waters, contractors			$6,000	$6,000	$6,000	$6,000	$6,000
I.E.2.	Consistently fund the plan and programs for long-term benefit	DFW, SFR, FWS	DFW	AC	as outlined in table						
I.E.2.a.	Apply existing funding and strategies	LARE, DFW, SFR, FWS	DFW	DEP, LARE, DNP, TNC, AC	as outlined in table						
I.E.2.b.	Support and develop dedicated sources of funding (10 days annually)							$6,000	$6,000	$6,000	$6,000
I.E.2.c.	Develop and support private and corporate funding (10 days annually)							$6,000	$6,000	$6,000	$6,000
I.E.2.d.	Fund law enforcement for increased focus on ANS	DNR, LARE	LE	DFW							
II.	**PREVENTION**										
II.B.	**Regulate introduction of exotics**										
II.B.1.	Examine effectiveness of regulation versus education						$15,000				
II.B.1.a.	Species acquired through global trade and internet sales							see 2.B.1.b.			
II.B.1.b.	Release of unwanted aquarium pets (brochure and distribution)							$20,000	$1,000	$1,000	$1,000
II.B.2.	Develop effective state regulations to prevent introductions (policy development process)							$25,000			
II.B.2.a	Acquire participation of state and congressional legislators							see 2.B.2.	$6,000	$6,000	$6,000
II.B.2.b.	Enact comprehensive and protective legislation	ISL	ISL	DNR				see 2.B.2.			
II.B.2.c.	Institute Aquaculture permitting system that allows controlled use	DFW, SFR	DFW	IAA		see 5.C.2.b					
II.B.2.d.	Address the effects of fragmented or degraded habitat				see 5.C.2.						
II.B.2.e.	Consider boat trailer laws	DFW	DFW	LE, BASS			see 2.B.2.				
II.E.	**Educate the public on prevention**										
II.E.1.	Unintentional introduction	DFW, SFR, FWS	DFW	LE, InDOT, BASS					see 2.E.1.a.		
II.E.1.a.	Notify incoming travelers of current distributions (brochure and distribution)	DFW, SFR, FWS	DFW	LE, InDOT, BASS					$20,000	$500	$500
II.E.1.b.	Notify travelers leaving Indiana of problems in other areas (brochure and distribution)	DFW, SFR, FWS	DFW	LE, InDOT, BASS						$20,000	$500
II.E.1.c.	Use common entry points for education	DFW, SFR, FWS	DFW	LE, InDOT, BASS						see 2.E.1.c.	
II.E.1.d.	Provide information to anglers about illegal species (one page in annual *Fishing Guide*)	DFW, SFR, FWS	DFW	LE, BASS	$2,188	$2,188	$3,000	$3,000	$3,000	$3,000	$3,000

V.	**CONTROL**										
V.A.	**Research and develop control methods for priority species**										
V.A.1.	Identify and prioritize species	DNR	DFW	AC			$15,000				
V.A.1.a.	Use risk analysis tools and public input	DFW, FWS	Univ Notre Dame	DEP, LARE, DNP, TNC, AC				$60,000			
V.A.1.b.	Prioritize control efforts in publicly funded areas	DFW, SFR, DNP, DEP, LARE	DFW	DEP, DNP					$10,000		
V.A.2.	Develop plans to depress populations	DFW, SFR, DNP, DEP, LARE	DFW	DEP, DNP, LARE, lake associations, private waters						$55,000	
V.A.2.a.	Fully study and implement management options for milfoil ($800,000 annually estimated cost of milfoil control by lake associations; $92,816 in FY01 supplemental LARE funds for plant control; $43,650 in FY02 for milfoil weevil demonstration study; $700,000 in FY03-07 in new LARE funds)	LARE, water and power utilities	Lake associations, water and power utilities	IDNR, IDEM, ISDH, IUPUI-CEES, Purdue Botany, plant control firms	$892,816	$843,650	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000
V.A.2.b.	Control of nuisance Cyanobacteria (cost estimates based on permits for water utilities in Indianapolis, Kokomo, and Richmond)	Water utilities	Water utilities	IDNR, IDEM, ISDH, IUPUI-CEES, IU-SPEA, Purdue Botany, plant control firms	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000
V.A.2.c.	Control of toxin producing nonindigenous algae (cost estimates based on permits for water utilities in Indianapolis, Kokomo, and Richmond)	Lake associations, water utilities	Lake associations, water utilities	IDNR, ISDH, IUPUI-CEES, Purdue Botany, plant control contractors	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000
V.A.2.d.	Control methods for plants that limit flow in canals (cost estimates based on permits for water utilities in Indianapolis)	Lake associations, water utilities, LARE	Lake associations, water utilities	IDNR, ISDH, IUPUI-CEES, Purdue Botany, plant control contractors	$65,000	$65,000	$65,000	$65,000	$65,000	$65,000	$65,000
V.A.2.e.	Fisheries techniques for renovation and restocking	SFR, DFW	SFR, DFW	SFR, DFW, fisheries contractors	$1,470,558	$1,445,558	$1,468,000	$1,468,000	$1,468,000	$1,468,000	$1,468,000
V.C.	**Coordinate control programs**										
V.C.1.	Incorporate control efforts into all land use management plans (e.g., reed canary grass)	NRCS, IDNR, InDOT	IDNR	NRCS, InDOT	$5,000	$5,000	$10,000	$10,000	$10,000	$10,000	$10,000
V.C.1.a.	Develop and distribute watershed level criteria (workshop)	IDNR, IDEM 319	IDNR	IDEM, Coop Ext					$11,200	$3,600	$3,600
V.C.1.b.	Cleanup of contaminated sites	IDEM, NRDA	IDEM	DFW			$10,000	$10,000	$10,000	$10,000	$10,000
V.C.1.c.	Habitat restoration plans (ANS on nature preserves managed by DNP: $75,000+ and TNC: $30,000 annually)	DNP, DFW, SFR, private funds	DNP	TNC, DFW	$129,225	$129,225	$105,000	$105,000	$105,000	$105,000	$105,000
V.C.2.	State permitting programs for control methods	IDNR, SFR	IDNR	IDEM, Coop Ext	see 5.C.2.b-e						
V.C.2.a.	Aquatic plant control permits (200 permits annually)	IDNR, SFR	IDNR	IDEM	$11,219	$11,219	$12,000	$12,000	$12,000	$12,000	$12,000
V.C.2.b.	Piscicide permits (2 permits annually)	IDNR, SFR	IDNR	IDEM	$300	$300	$300	$300	$300	$300	$300
V.C.2.c.	Drinking water supply permits (10 permits annually)	IDEM	IDEM	IDNR, ISDH	$3,000	$3,000	$2,000	$2,000	$2,000	$2,000	$2,000
V.C.2.d.	Ensure proper use of pesticides	ISCO	ISCO	IDEM, IDNR	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
V.C.2.e.	Research on restricted species and innovative tools	state, federal, private grants	Purdue Univ of Notre Dame	IAA, IDNR, InDOT, IDEM			$60,000	$75,000	$100,000	$100,000	$100,000
	TOTAL EXPENDITURES =				**$3,165,179**	**$3,121,013**	**$4,134,400**	**$4,125,600**	**$4,125,600**	**$4,159,000**	**$4,084,500**

KEY

AC = ANS Advisory Committee (all stakeholders)
CLP = IU-SPEA and IDEM Clean Lakes Program
Coop Ext = cooperative extension service

DEP = DNR Division of Entomology and Plant Pathology
DFW = DNR Division of Fish and Wildlife
DNP = DNR Division of Nature Preserves
DNR = Department of Natural Resources
FWS = US Fish and Wildlife Service, NISA funds
GLC = Great Lakes ANS Panel
IAA = Indiana Aquaculture Association
IBI = Indiana Biodiversity Initiative
IDEM = Indiana Department of Environmental Management
ILMS = Indiana Lakes Management Society
InDOT = Indiana State Department of Transportation
ISDH = Indiana State Department of Health
ISL = Indiana State Legislature
IUPUI-CEES = IUPUI Center for Earth and Environmental Science
IU-SPEA = Indiana University School of Public and Environmental Affairs
LE = DNR Division of Law Enforcement
MICRA = Mississippi Interstate Cooperative Resource Association
MRBP = Mississippi River Basin Panel (on ANS)
NRCS = Natural Resources Conservation Service
NRDA = Natural Resource Damage Assessments
OISC = Office of the Indiana State Chemist
TELWF = Tippecanoe Environmental Lake and Watershed Foundation
TNC = The Nature Conservancy, Indiana

APPENDIX G: Implementation Schedule: Two-year short term action plan

Section 1204(a)(2)(C) requires that a state management plan include a schedule for implementing the plan, including a schedule of annual objectives. It is difficult to develop a highly detailed implementation schedule because of funding ambiguities in the program. Full implementation of the plan is dependent upon federal aid. If Indiana implements the program without federal assistance, the program would be considerably smaller in scope and would take much longer to implement.

Year One Action Plan (October 1, 2003-Sept 31, 2004)

Year one tasks that can be implemented with existing state funding:
I.A.2. Prioritize activities and adhere to timelines in the ANS Management Plan under guidance of the Advisory Council.
I.A.3. Prioritize enforcement actions in the ANS Management Plan under guidance of the Advisory Council.
I.C.1. Understand and influence public perception
I.D.1. Institute a state program on ANS management, based on the plan developed in FY02.
I.D.1.b. Create a central clearinghouse.
I.E.2. Consistently fund the plan and programs for long-term benefit
I.E.2.a. Apply existing funding and strategies
II.B.2.c. Permitting system that allows controlled use
V.A.2.a. Fully study management options for milfoil
V.A.2.b. Control of nuisance Cyanobacteria
V.A.2.c. Control of toxin producing nonindigenous algae
V.A.2.d. Control of plants that limit flow in canals
V.A.2.e. Fisheries techniques for renovation and restocking
V.C.2.a. Aquatic plant control permits
V.C.2.b. Piscicide permits
V.C.2.c. Drinking water supply permits
V.C.2.d. Ensure proper use of pesticides

Year one tasks dependent upon new funding:
I.A.I. Develop complete content for a statewide internet web site (limited content was created in FY01-FY02).
I.B.1. Influence regional and national policies by drafting responses to national policy issues.
I.B.2. Participate in regional activities of the Great Lakes basin (send Indiana representative to two meetings per year)
I.B.3. Participate in regional activities of the Mississippi River basin (send Indiana representative to two meetings per year)
I.C.1.a. Survey public opinion regarding ANS issues and priorities.
I.D.1.a. Hire a full time coordinator and staff (2 FTEs) to implement the ANS plan.

I.D.1.c. Support a statewide interagency task force that meets monthly.
I.D.2. Build capacity within professional and citizen organizations.
I.D.2.a. Hold public meetings, workshops, or conferences at least annually to update citizens on ANS issues and available outreach products.
I.D.2.b. Involve citizens in education and management processes.
I.E.1.a. Develop tools to assess economic impact
I.E.1.c. Early response to initial infestations
I.E.1.d. Supplementary funding for emergency actions
II.E.1.d. Notify anglers of illegal species through page in the annual Fishing Guide.
V.A.1. Identify and prioritize species
V.C.1. Control efforts into all land use management plans
V.C.1.b. ANS control in cleanup of contaminated sites
V.C.1.c. Habitat restoration plans
V.C.2.e. Research on restricted species and tools
VII.A.1. The ANS program coordinator will prepare an annual report, based on program evaluation.

Year Two Action Plan (October 1, 2004-Sept 31, 2005)

Year two tasks that can be implemented with existing state funding:
I.A.2. Prioritize activities and adhere to timelines in the ANS Management Plan under guidance of the Advisory Council.
I.A.3. Prioritize enforcement actions in the ANS Management Plan under guidance of the Advisory Council.
I.D.1. Institute a state program on ANS management, based on the plan developed in FY02.
I.D.1.b. Create a central clearinghouse.
I.E.2. Consistently fund the plan and programs for long-term benefit
I.E.2.a. Apply existing funding and strategies
I.E.2.d. Fund law enforcement for increased focus on ANS
V.A.2.b. Control of nuisance Cyanobacteria
V.A.2.c. Control of toxin producing nonindigenous algae
V.A.2.d. Control of plants that limit flow in canals
V.A.2.e. Fisheries techniques for renovation and restocking

Year two tasks dependent upon new funding:
I.A.1. Develop complete content for a statewide internet web site (limited content was created in FY01-FY02).
I.C.1.b. Develop an outreach program to inform the public about risks and responsibilities.
I.C.1.c. Develop a common language within the context of the outreach program.
I.C.1.d. Establish relationships with various sectors targeted to affect particular ANS distribution pathways.
I.C.2. Provide the public with current information about ANS.
I.C.2.a. Explain the criteria that distinguish harmful exotics from benign exotics, especially in regard to aquaculture use.
I.C.2.d. Use primary contact points for educating water users
I.D.1.a. Hire a full time coordinator and staff (2 FTEs) to implement the ANS plan.
I.D.1.c. Support a statewide interagency task force that meets monthly.
I.D.2. Build capacity within professional and citizen organizations.
I.D.2.a. Hold public meetings, workshops, or conferences at least annually to update citizens on ANS issues and available outreach products.
I.D.2.b. Involve citizens in education and management processes.
I.E.1. Determine cost-effective principles and priorities for funding
I.E.1.c. Early response to initial infestations
I.E.1.d. Supplementary funding for emergency actions
I.E.2.b. Support and develop dedicated sources of funding
I.E.2.c. Develop and support private and corporate funding
II.B.1. Examine effectiveness of regulation versus education
II.B.1.a. Global trade and internet sales
II.B.1.b. Release of unwanted aquarium pets (develop brochure).
II.B.2. Effective state regulations to prevent introductions (facilitated policy development process).
II.B.2.a. Participation of state and congressional legislators

II.B.2.b. Enact comprehensive and protective legislation
II.B.2.e. Consider boat trailer laws
V.A.1.a. Use risk analysis tools and public input
V.A.2.a. Fully study management options for milfoil
VII.A.1. The ANS program coordinator will prepare an annual report, based on program evaluation.

APPENDIX H: Indiana ANS Plan - Work Group

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APPENDIX J: Section 1204 of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L.101-646)

Sec. 1204. STATE AQUATIC NUISANCE SPECIES MANAGEMENT PLANS.

(a) STATE OR INTERSTATE INVASIVE SPECIES MANAGEMENT PLANS.--

(1) IN GENERAL.--After providing notice and opportunity for public comment, the Governor of each State may prepare and submit, or the Governors of the States and the governments of Indian Tribes involved in an interstate organization, may jointly prepare and submit--

(A) a comprehensive management plan to the Task Force for approval which identifies those areas or activities within the State or within the interstate region involved, other than those related to public facilities, for which technical, enforcement, or financial assistance (or any combination thereof) is needed to eliminate or reduce the environmental, public health, and safety risks associated with aquatic nuisance species, particularly the zebra mussel; and

(B) a public facility management plan to the Assistant Secretary for approval which is limited solely to identifying those public facilities within the State or within the interstate region involved for which technical and financial assistance is needed to reduce infestations of zebra mussels.

(2) CONTENT.--Each plan shall, to the extent possible, identify the management practices and measures that will be undertaken to reduce infestations of aquatic nuisance species. Each plan shall--

(A) identify and describe State and local programs for environmentally sound prevention and control of the target aquatic nuisance species;

(B) identify Federal activities that may be needed for environmentally sound prevention and control of aquatic nuisance species and a description of the manner in which those activities should be coordinated with State and local government activities;

(C) identify any authority that the State (or any State or Indian Tribe involved in the interstate organization) does not have at the time of the development of the plan that may be necessary for the State (or any State or Indian Tribe involved in the interstate organization) to protect public health, property, and the environment from harm by aquatic nuisance species; and

(D) a schedule of implementing the plan, including a schedule of annual objectives, and enabling legislation.

(3) CONSULTATION.--

(A) In developing and implementing a management plan, the State or interstate organization should, to the maximum extent practicable, involve local governments and regional entities, Indian Tribes, and public and private organizations that have expertise in the control of aquatic nuisance species.

(B) Upon the request of a State or the appropriate official of an interstate organization, the Task Force or the Assistant Secretary, as appropriate under paragraph (1), may provide technical assistance in developing and implementing a management plan.

(4) PLAN APPROVAL.--Within 90 days after the submission of a management plan, the Task Force or the Assistant Secretary in consultation with the Task Force, as appropriate under paragraph (1), shall review the proposed plan and approve it if it meets the requirements of this subsection or return the plan to the Governor or the interstate organization with recommended modifications.

(b) GRANT PROGRAM.--

(1) STATE GRANTS.--The Director may, at the recommendation of the Task Force, make grants to States with management plans approved under subsection (a) for the implementation of those plans.

(2) APPLICATION.--An application for a grant under this subsection shall include an identification and description of the best management practices and measures which the State proposes to utilize in implementing an approved management plan with any Federal assistance to be provided under the grant.

(3) FEDERAL SHARE.--

(A) The Federal share of the cost of each comprehensive management plan implemented with Federal assistance under this section in any fiscal year shall not exceed 75 percent of the cost incurred by the State in implementing such management program and the non-Federal share of such costs shall be provided from non-Federal sources.

(B) The Federal share of the cost of each public facility management plan implemented with Federal assistance under this section in any fiscal year shall not exceed 50 percent of the cost incurred by the State in implementing such management program and the non-Federal share of such costs shall be provided from non-Federal sources.

(4) ADMINISTRATIVE COSTS.--For the purposes of this section, administrative costs for activities and programs carried out with a grant in any fiscal year shall not exceed 5 percent of the amount of the grant in that year.

(5) IN-KIND CONTRIBUTIONS.--In addition to cash outlays and payments, in-kind contributions of property or personnel services by non-Federal interests for activities under this section may be used for the non-Federal share of the cost of those activities.

(c) ENFORCEMENT ASSISTANCE.--Upon request of a State or Indian tribe, the Director or the Under Secretary, to the extent allowable by law and in a manner consistent with section 141 of title 14, United States Code, may provide assistance to a State or Indian tribe in enforcing an approved State or interstate invasive species management plan.

INDIANA DEPARTMENT OF REVENUE
DEPARTMENTAL NOTICE #3
NOVEMBER, 2003
INTEREST RATES FOR CALENDAR YEAR 2004

This document does not meet the definition of a "statement" required to be published in the *Indiana Register* under IC 4-22-7-7. However, under IC 6-8.1-10-1(c), the Commissioner is required to establish, on or before November 1 of each year, the applicable interest rates for tax overpayments and underpayments that will take effect for the immediately succeeding calendar year. The purpose of this notice is to inform the public of the interest rates that will be effective for the calendar year beginning January 1, 2004.

The rate of the interest for an excess tax payment is the percentage rounded to the nearest whole number that equals the average investment yield on state money for the state's previous fiscal year, excluding pension fund investments, as published in the Auditor of State's comprehensive annual financial report. Based on this calculation, the rate of interest for an excess tax payment for calendar year 2004 will be two percent (2%).

The rate of interest for an underpayment of tax is the percentage rounded to the nearest whole number that equals two (2) percentage points above the average investment yield on state money for the state's previous fiscal year, excluding pension fund investments, as published in the Auditor of State's comprehensive annual financial report. Based on this calculation, the rate of interest for an underpayment of tax for calendar year 2004 will be four percent (4%).

For taxpayer information, attached is a list of comparable percentages applicable in previous calendar years.

Indiana Department of State Revenue
Kenneth L. Miller,
Commissioner

YEAR	OVERPAYMENTS	DELINQUENT PAYMENTS
1989	10%	10%
1990	10%	10%
1991	10%	10%
1992	8%	8%
1993	7%	7%
1994	7%	7%
1995	4%	6%
1996	5%	7%
1997	5%	7%
1998	5%	7%
1999	5%	7%
2000	5%	7%
2001	6%	8%
2002	6%	8%

2003	4%	6%
2004	2%	4%

DEPARTMENT OF STATE REVENUE

0220010188; 0220010190.SLOF

SUPPLEMENTAL LETTER OF FINDINGS: 01-0188SLOF and 01-0190SLOF
Indiana Corporate Income Tax
For the Tax Year 1996

NOTICE: Under 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of the document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Denial of Claim for Refund – Gross Income Tax.

Authority: IC 6-2.1-2-5(9); IC 6-2.1-8-5(a); IC 6-8.1-9-1; IC 6-8.1-9-2; IC 6-8.1-9-2(a).

Taxpayer challenges the Department of Revenue's decision denying taxpayer a refund or a credit for an amount of taxes paid during 1996. Taxpayer maintains that the request for refund was timely filed and that the Department erred in denying either the credit or a refund.

STATEMENT OF FACTS

Two closely related, out-of-state business entities, submitted a joint protest to the Department of Revenue (Department). As in the original Letter of Findings (LOF), the companies are designated as "taxpayer holding company" and "taxpayer operating company."

Taxpayer operating company was in the business of running three restaurants in Indiana. Taxpayer operating company had no other Indiana business activities.

Taxpayer holding company held real estate and personal property used by taxpayer operating company. This real estate and personal property was used in the day-to-day operation of the three Indiana restaurants. Taxpayer holding company was incorporated in 1969 for the specific purpose of holding the various Indiana restaurant properties.

The officers and directors of the two companies are identical. As stated by taxpayer's representative during the original hearing, taxpayer holding company was merely a "shell corporation" created entirely for the purpose of allowing taxpayer holding company to obtain advantageous "single asset" financing.

In the original audit, it was determined that taxpayer holding company was a "non-filer" receiving Indiana source income; the original audit determined that taxpayer holding company was subject to the state's corporate income tax scheme, and the audit assessed taxes accordingly.

The original LOF disagreed with taxpayers' contentions that taxpayer holding company – by virtue of a purported agency relationship – did not receive Indiana gross income separately identifiable from the income of taxpayer operating company. Taxpayer holding company was reimbursed for depreciation expenses it incurred on personal property held in Indiana; taxpayer holding company received rental income attributable to real property owned within the state; in addition – and at the heart of the issue raised by taxpayer during the rehearing – taxpayer holding company sold some of its Indiana real property in 1996, received the money from that sale, and paid gross income taxes on the proceeds. In effect, the LOF determined that taxpayer holding company received gross income and was subject to this state's gross income tax scheme.

However, the LOF also found that taxpayer holding company – in calculating its gross income tax liability – was entitled to deduct from its gross income an amount of money it received from the sale of certain Indiana real estate and then used to pay any outstanding debt on that previously encumbered property.

After the LOF was issued, a supplemental audit report was conducted to determine taxpayer holding company's unpaid state income tax. In doing so, the supplemental report reflected the determination that taxpayer holding company was entitled to a reduction in calculating the gross income subject to tax on the verifiable portion of the proceeds from the 1996 sale of the Indiana real estate used to repay the principal on the outstanding debt on that Indiana real property.

In calculating taxpayer holding company's 1996 tax liability, taxpayer holding company was credited for the amount of tax it paid at the time of the property sale. That credit reduced taxpayer holding company's 1996 tax liability to zero. However, the audit determined that taxpayer holding company was not entitled to a refund of the tax in excess of the amount used to offset the 1996 liability.

Taxpayer challenged the decision not to refund the amount of excess 1996 taxes and submitted a letter to that effect. This Supplemental Letter of Findings follows.

DISCUSSION

I. Denial of Claim for Refund – Gross Income Tax.

At the time taxpayer holding company sold the Indiana real property in 1996, taxpayer holding company paid gross income tax to the treasurer of an Indiana county – the situs of that real property. Indiana imposes a gross income tax of 1.2 percent on the proceeds receives from "sales of real estate...." IC 6-2.1-2-5(9). IC 6-2.1-8-5(a) states that, "A taxpayer shall pay the gross income taxes imposed on the sale or transfer of an interest in real estate by paying the tax to the treasurer of the county in which the real estate is located."

Using specific dollar amounts for illustrative purposes, taxpayer holding company paid $10,000 in gross income tax in 1996. In August of 2002, the Department issued the original LOF which concluded that taxpayer holding company should have been paying Indiana corporate income tax during 1991 through 1998. Accordingly, the supplemental audit determined that – again for purposes of illustration – taxpayer holding company owed $4,000 for 1996 Indiana income tax. Taxpayer holding company was given credit for the $10,000; taxpayer holding company's $4,000 1996 liability was reduced to zero.

Taxpayer holding company maintains that it is entitled to a refund of the remaining $6,000. Alternatively, taxpayer holding company argues that that $6,000 should be used to offset the remaining 1991 to 1995 and 1997 to 1998 liability.

IC 6-8.1-9-1 states that, "If a person has paid more tax than the person determines is legally due for a particular taxable period, the person may file a claim for refund with the department... in order to obtain the refund, the person must file the claim with the department within three (3) years after the latter of the following (1) The due date of the return: (2) The date of payment."

There is no dispute that taxpayer holding company paid gross income tax on the proceeds received from the 1996 sale of real property located within the state. There is no dispute that the supplemental audit review credited that payment against taxpayer holding company's 1996 corporate income tax liability reducing taxpayer holding company's 1996 liability to zero. There is no dispute that – after offsetting the 1996 liability – a portion of the 1996 gross income tax payment remained "orphaned." The supplemental audit review declined to credit the "orphaned" amount in order to offset taxpayer holding company's outstanding liability for the remaining years at issue.

Taxpayer holding company first argues that it is entitled to a cash-in-hand refund of the orphaned amount. Taxpayer bases its argument on the ground that, pursuant to IC 6-8.1-9-1, taxpayer holding company submitted a timely claim for refund within the three-year limitations period. Taxpayer's claim is wholly meritless. Taxpayer holding company maintains that it is entitled to a cash-in-hand refund by virtue of the fact that taxpayer operating company submitted Indiana returns in which it – taxpayer operating company – claimed credit for the 1996 gross income tax payment. The refund statute does not permit such a strained interpretation. "If *a person* has paid more tax than *the person* determines is legally due for a particular taxable period, *the person* may file a claim for refund with the department...." IC 6-8.1-9-1 (*Emphasis added*). "[I]n order to obtain the refund, *the person* must file the claim with the department within three (3) years...." Id. Taxpayer holding company and taxpayer operating company made a decision to incorporate as separate business entities. Presumably, the two entities chose to do so based on the organizational, financial, and tax benefits attendant upon such an arrangement. Having made that decision, both entities must also live with the limitations pursuant to parties' dual existence. Under IC 6-8.1-9-1, taxpayer holding company was entitled to submit a claim for refund of taxes it paid in 1996. Taxpayer holding company failed to do so. There is no merit to taxpayer holding company's implication that it is entitled to the refund by virtue of tax returns submitted by an entirely distinct entity.

Nonetheless, taxpayer holding company sets out a separate argument; it argues that – having been denied the cash-in-hand refund – under IC 6-8.1-9-2, the Department is obligated to apply the orphaned 1996 gross income tax payment against taxpayer holding company's 1991 to 1995 and 1997 to 1998 outstanding tax liabilities.

IC 6-8.1-9-2(a) reads in relevant part as follows:

> If the department finds that a person has paid more tax for a taxable year than is legally due, the department shall apply the amount of the excess against the amount of that same tax that is assessed and is currently due. The department may then apply any remaining excess against any of the listed taxes that have been assessed against the person and that are currently due.

Taxpayer maintains that pursuant to the cited language, that the Department is obligated to apply the "excess" 1996 gross income tax payment to its remaining tax liabilities. However, taxpayer's claim is necessarily predicated on the statutory language which states that, "If the department finds that a person has paid more tax...." Id. Taxpayer's argument necessarily proceeds from the assumption that the Department "found" taxpayer paid excess gross income taxes during 1996. There is no indication in either the original audit report or the supplemental review that the Department "found" any such thing. Essentially, the Department determined that once taxpayer paid the assessment, it would be entitled to a refund of the full amount that would be allowed per the statute of limitations. The supplemental audit simply took an administrative shortcut obviating the need for the taxpayer to pay the assessment and file a refund claim.

IC 6-8.1-9-1 places the burden for requesting a refund of taxes squarely on the taxpayer. "If a person has paid more tax than the person determines is legally due for a particular taxable period, *the person may file a claim for a refund with the department.*"

IC 6-8.1-9-1(a). (*Emphasis added*). Hand-in-hand with the taxpayer's obligation to submit a refund claim, is the obligation to submit within the limited time provided. "[I]n order to obtain the refund, the person must file the claim with the department within three (3) years after the latter of the following (1) The due date of the return. (2) The date of payment." Id.

Taxpayer seeks to avoid the three-year limitation imposed under IC 6-8.1-9-1(a) by piggy-backing on the decision to allow a credit for the amount of gross income tax paid at the time of the 1996 real estate sale. However, as noted above, the Department has made no "finding" which would necessitate granting a credit against taxpayer's holding company's remaining tax liabilities. It was taxpayer holding company's obligation to pay Indiana corporate income taxes; it was taxpayer holding company's obligation to submit a claim for a refund; it was taxpayer holding company's obligation to submit that claim with the three-year limitations period.

FINDING

Taxpayer's protest is respectfully denied.

DEPARTMENT OF STATE REVENUE

04-20010304.LOF

LETTER OF FINDINGS NUMBER: 01-0304
ADJUSTED GROSS INCOME TAX
For Year 1998

NOTICE: Under Ind. Code § 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUES

I. Sales/Use Tax—Best information available; failure to maintain adequate records

Authority: 45 IAC 2.2-2-2; 45 IAC 2.2-3-25; 45 IAC 15-5-3; 45 IAC 15-5-1.

Taxpayer argues that the proposed assessment should be reduced. Taxpayer failed to maintain adequate business records. However, taxpayer believes that the auditor's use of the best information available was inappropriate.

STATEMENT OF FACTS

Taxpayer underwent a computer system change in 1998 that resulted in what the taxpayer believes to be suspect information that was relied upon by the auditor. The taxpayer believes that the missing records would show that 1998 Indiana service revenues were higher than existing business records indicate. The auditor relied on all of the information provided to her by the taxpayer and refused to participate in an exercise of estimating the missing data by looking at the statistical data of other years.

Taxpayer, along with the remittance for an uncontested portion of the tax and penalty assessed, protested the remainder in a letter dated November 2, 2001. Taxpayer was mailed a notice of hearing on June 3, 2003 and responded to said notice on June 9, 2003. During this response, the hearing date was confirmed to be June 24, 2003, to be held by telephone at 10 a.m. A confirmation letter was mailed to the taxpayer on June 10, 2003. Taxpayer failed to contact the hearing officer at the designated time.

DISCUSSION

I. Sales/Use Tax—Best information available; failure to maintain adequate records

As a registered retail merchant under a duty to collect and remit Indiana gross retail tax as agent for the state, taxpayer is required to document the tax status of all its Indiana transactions. 45 IAC 2.2-2-2. The burden of proving a transaction is not subject to gross retail taxation is on the retail merchant. 45 IAC 2.2-3-25. The Legislature has not authorized the Department to speculate on the content of business records that are lost, do not exist, or are otherwise unavailable for audit examination.

An audit conducted in good faith according to established protocols establishes a prima facie presumption that the resulting assessment is valid. The burden of proving otherwise is on the taxpayer. 45 IAC 15-5-3. The alleged content of lost records does not persuasively contradict the content of existing business records verified on audit. The proposed amendment reflects the best information available to the Department under 45 IAC 15-5-1.

The taxpayer has failed to carry its burden of proof that the transactions in question were not subject to gross retail tax. Taxpayer was neither able to establish that the audit of the best information available was carried on in bad faith nor that the record verifies its position.

FINDINGS

The taxpayer is respectfully denied.

DEPARTMENT OF STATE REVENUE

0220020060.LOF

LETTER OF FINDINGS: 02-0060
Indiana Corporate Income Tax
For the Years 1998 and 1999

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of the document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Income from Services Provided to Indiana Customers – Adjusted Gross Income Tax.

Authority: IC 6-3-2-2.2(e); 45 IAC 3.1-1-55; Black's Law Dictionary (7th ed. 1999).

Taxpayer argues that the Department erred in determining that money received from its Indiana customers for performing services should be included in the sales factor used in determining taxpayer's adjusted gross income tax liability.

STATEMENT OF FACTS

Taxpayer is an out-of-state business which provides insurance information services. Taxpayer provides these services to insurance companies and automobile repair shops. When an insured's automobile is involved in an accident and the insurance company decides that the vehicle is "totaled," the insurance company turns to taxpayer to find out the value of the totaled car. This is one of the services which taxpayer provides; it determines an authoritative value for wrecked cars.

Taxpayer runs its business from two out-of-state locations. Taxpayer has a computer data-base center in Illinois, and taxpayer has an operational center in South Dakota. According to taxpayer, when one of its customers requests a wrecked vehicle valuation, the services related to determining the valuation are performed "primarily in South Dakota and to a lesser extent in Illinois." According to the information available, taxpayer has employees working within this state. It hires employees to collect information on vehicles for sale within this state. In addition, taxpayer has a "direct sales force" and "independent sales representatives" who offer taxpayer's services to insurance companies and auto body repair shops.

The Department's audit of taxpayer's 1998 and 1999 records determined that the income received from Indiana customers constituted "Indiana sales... included in the sales factor." As a result, the audit concluded that taxpayer owed additional Indiana adjusted gross income tax. Taxpayer disagreed with that conclusion and submitted a protest. An administrative hearing was held, and this Letter of Findings results.

DISCUSSION

I. Income from Services Provided to Indiana Customers – Adjusted Gross Income Tax.

Taxpayer argues that income received from Indiana customers is not subject to the state's adjusted gross income tax. Taxpayer bases this argument on the ground that activities related to the performance of those services is conducted in South Dakota and Illinois. Specifically, taxpayer cites to 45 IAC 3.1-1-55 which states:

> Gross receipts from transactions other than sales of tangible personal property shall be included in the numerator of the sales factor if the income producing activity which gave rise to the receipts is performed wholly within this state. Except as provided below if the income producing activity is performed within and without this state such receipts are attributable to this state if the greater proportion of the income producing activity is performed here, based on costs of performance.

Taxpayer concludes that the cost of producing and managing its specialized automobile information is incurred in South Dakota; as a result, its Indiana source income – money received from Indiana insurers and Indiana auto repair shops – should be apportioned to South Dakota under the "cost of performance rules."

Under the rule cited by taxpayer, the issue is the location of the taxpayer's "income producing activity." 45 IAC 3.1-1-55 states that the term, "income producing activity" means "the act or acts directly engaged in by the taxpayer for the ultimate purpose of obtaining gains or profits." The rule states that a taxpayer's "[i]ncome producing activity is deemed performed at the situs of real, tangible and intangible personal property or the place where personal services are rendered." Id.

Taxpayer is plainly in the business of providing "personal services" and is not in the business of selling property. The regulation states that a service provider's income is sourced to the place where the "personal services are rendered." Id. The word "rendered" means "to transmit or deliver." Black's Law Dictionary 1288 (7th ed. 1999).

Taxpayer assembles and manages the computerized automobile information in South Dakota and Illinois. However, the issue is not the management and storage of this information; rather the question at issue relates to the source of its income. Under 45 IAC 3.1-1-55, the "income producing activity" does not take place in South Dakota or Illinois. Instead, the "income producing activity" occurs at the place where taxpayer "renders" its information service to an Indiana customer.

In taxpayer's specialized business, the information taxpayer acquires and manages would have no value unless that information was offered to and accepted by an Indiana customer. The money taxpayer receives is not received by virtue of the activities which taxpayer conducts in Illinois and South Dakota. The money is received because the information is "rendered" to an Indiana customer.

The statute is straightforward. Under IC 6-3-2-2.2(e), "Receipts from the performance of fiduciary and other services are attributable to the state in which the benefits of the services are consumed." Taxpayer receives money because it offers services to Indiana consumers who obtain the benefit of those services within this state. The Department is unable to accept the argument that the income is obtained because it performs activities in South Dakota and Illinois.

FINDING

Taxpayer's protest is respectfully denied.

DEPARTMENT OF STATE REVENUE

0220020509.LOF

LETTER OF FINDINGS: 02-0509
Indiana Corporate Income Tax
For the Tax Years 1998, 1999, and 2000

NOTICE: Under 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of the document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Add-Back of Taxes Based on or Measured by Income – Indiana Adjusted Gross Income Tax.

Authority: IC 6-3-1-3.5(b); IC 6-3-1-3.5(b)(3); Consolidation Coal Co. v. Ind. Dept. of Revenue, 583 N.E.2d 1199 (Ind. 1991); Consolidation Coal Co. v. Ind. Dept. of Revenue, 538 N.E.2d 309 (Ind. Tax 1989); Wash. Rev. Code § 82.04.070; Wash. Rev. Code § 82.04.080; Wash. Rev. Code § 82.04.090; Wash. Rev. Code § 82.04.100; Wash. Rev. Code § 82.04.220; Wash. Rev. Code § 82.04.230; Wash. Rev. Code § 82.04.240; Wash. Rev. Code § 82.04.450; Wash. Admin. Code § 458-20-112; Tax Management Multistate Tax Portfolios (1998).

Taxpayer argues that Washington Business and Occupation (B&O) Tax is not a tax based on or measured by income. Accordingly, taxpayer maintains that the Department erred in requiring taxpayer to add back the Washington tax in order to determine its Indiana adjusted gross income.

STATEMENT OF FACTS

Taxpayer is an out-of-state company in the business of growing, harvesting, manufacturing, and marketing forest products. It grows trees, cuts them down, and turns them into lumber. In addition – through its various subsidiaries – it is also engaged in real estate development, construction, paper production, and the provision of financial services.

The Department conducted a review of taxpayer's business records and tax returns. In reviewing the taxpayer's Indiana returns, the audit review determined that the taxpayer incorrectly failed to add back the federal deduction taken for the Washington B&O Tax. The decision to add back the Washington tax resulted in an assessment of additional Indiana income tax. The taxpayer disagreed with the Department's decision and submitted a protest to that effect. An administrative hearing was conducted during which taxpayer further explained the basis for its protest. This Letter of Findings results.

DISCUSSION

I. Add-Back of Taxes Based on or Measured by Income – Indiana Adjusted Gross Income Tax.

When a taxpayer calculates its federal taxable income, it is entitled to deduct state and local taxes pursuant to I.R.C. § 164. However, in calculating its Indiana adjusted income, taxpayer begins with federal taxable income as defined under I.R.C. § 63 but is thereafter required to make certain adjustments. IC 6-3-1-3.5(b).

One of these adjustments is found at IC 6-3-1-3.5(b)(3) which requires that the taxpayer "[a]dd an amount equal to any deduction or deductions allowed or allowable pursuant to Section 63 of the Internal Revenue Code for taxes *based on or measured by income* and levied at the state level by any state of the United States." (*Emphasis added*). A corporate taxpayer can deduct state and local income taxes when calculating its federal adjusted income; it may not do so for Indiana income tax purposes.

When taxpayer calculated its Indiana income tax, it decided that it was unnecessary to add back the amount of money it paid as Washington B&O Tax. It did so because taxpayer determined that this particular state tax is not a tax "based on or measured by income." According to taxpayer, the Washington B&O tax is a "privilege tax based on various business activities." In support of that contention, taxpayer cites to Wash. Rev. Code § 82.04.220 which states:

> Business and occupation tax imposed. There is levied and shall be collected from every person a tax for the act or privilege of engaging in business activities. Such tax shall be *measured by* the application of rates against the *value* or products, *gross proceeds* of sales, or *gross income* of the business, *as the case may be*. (*Taxpayer's emphasis*).

Taxpayer agrees that under the Washington B&O Tax, the income received by retailers and wholesalers is measured by income. However, taxpayer argues that when the Washington B&O tax is levied on "extracting" and "manufacturing" activities, the amount

of the tax is not based on income. Because taxpayer maintains that it is primarily in the business of "extracting" and "manufacturing," it should not be required to add back the Washington B&O Tax assessments imposed against those particular activities.

Washington State levies a gross receipts tax imposed on "the privilege of engaging in business." Tax Management Multistate Tax Portfolios 1610:0001 (1998). The most obvious difference between a gross receipts tax – such as the Washington B&O Tax – and a net income tax is in the number of deductions allowed; a gross receipts tax permits only limited deductions. Id. In addition, the Washington B&O Tax – unlike a net income tax – reaches all levels of the production and distribution process. Id.

Taxpayer is correct in that the Washington B&O tax is imposed on the "extraction" of natural resources from "the person's own land or from the land of another under a right or license granted by lease or contract." Wash. Rev. Code § 82.04.100. Taxpayer is also correct in that the tax is assessed against in-state manufacturing activities measured by the ultimate sales prices less transportation costs. Wash. Admin. Code § 458-20-112. Washington's tax scheme avoids the constitutional prohibition against taxing proceeds stemming from out-of-state sales by "merely mov[ing] back one step in the commercial process and plac[ing] a tax upon the extracting or manufacturing of the goods, instead of upon their sale." Multistate Tax Portfolios 1610:0004. In those instances in which a taxpayer is involved in multiple activities – extracting, manufacturing, retailing – Washington taxes the last activity to occur in the chain. Id. at 1610.0029.

The issue is whether the Washington B&O tax – including those portions of that tax levied against "extracting" and "manufacturing" – are based on or measured by income. The Indiana Supreme Court addressed the add-back issue in Consolidation Coal Co. v. Ind. Dept. of Revenue, 583 N.E.2d 1199 (Ind. 1991). In doing so, the court stated the "the phrase 'based on or measured by income' seems likely to be used in the same simple sense which defined the issue in Miles. Is the tax which payor wishes to add back measured by income? Or measured by value of property held?" Id.

Washington imposes its tax on the "gross proceeds of sales," the "gross income" of the business," and the "value proceeding or accruing" depending on the type of activity producing the income. Wash. Rev. Code § 82.04.070,.080,.090. For example, Washington imposes a tax equal of 0.484 percent on the "value of the products, including byproducts, extracted for sale or for commercial or industrial use." Wash. Rev. Code § 82.04.230. Similarly, the state imposes the identical rate of tax on manufacturers based upon "the value of the products, including byproducts, so manufactured regardless of the place of sale or the fact that deliveries may be made to points outside the state." Wash. Rev. Code § 82.04.240. The value of the manufacturer's products is "determined by the gross proceeds derived from the sale thereof whether such sale is at wholesale or at retail...." Wash Rev. Code § 82.04.450.

The Department concludes that the money paid by extractors or manufacturers pursuant to the Washington B&O Tax is attributable to a tax based on or measured by the taxpayer's income and is not based on the value of property. The Washington B&O tax is reasonably comparable to the West Virginia Business and Occupation Tax considered by the Tax Court in Consolidation Coal Co. v. Ind. Dept. of Revenue, 538 N.E.2d 309 (Ind. Tax 1989). In determining that the West Virginia tax should be added back in order to calculate Indiana adjusted gross income, the court compared the West Virginia Tax to Indiana's own Gross Income Tax and stated that, "[T]he tax in question is an excise tax levied upon those domiciled within the state, or who derived income from sources within the state, upon the basis of the privilege or domicile or the privilege of transacting business within the state, and... the burden may reasonably be measured by the amount of income." Id. at 311. The language quoted by the court in Consolidation aptly describes the Washington B&O Tax.

In calculating its Indiana adjusted gross income, the taxpayer is required under IC 6-3-1-3.5(b) to add back to its federal taxable income any deduction taken for taxes paid to Washington under that state's Business and Occupation Tax.

FINDING

Taxpayer's protest is respectfully denied.

DEPARTMENT OF STATE REVENUE

0120030268P.LOF

LETTER OF FINDINGS NUMBER: 03-0268P
Income Tax
Calendar Year 2002

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration – Penalty

Authority: IC 6-8.1-10-2.1(d); 45 IAC 15-11-2

The taxpayer protests the penalty on underpayment of estimated tax.

STATEMENT OF FACTS

The underpayment penalty for estimated tax was assessed on an income tax return filed for the calendar year 2002.

The taxpayer is an individual living in Indiana.

I. Tax Administration – Penalty

DISCUSSION

The taxpayer argues the underpayment penalty should be waived as the estimated tax underpayment was an error on the part of the taxpayer's employer. The taxpayer's employer was unable to withhold on short-term disability income for the taxpayer. This lack of withholding caused a shortage in estimated tax whereby the taxpayer was subsequently assessed an underpayment penalty.

Information Bulletin #3 states a taxpayer is required to pay estimated tax on income that has not been withheld on, and, the amount of tax is more than $100.00.

45 IAC 15-11-2(b) states, "Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer."

The Department finds the taxpayer was ignorant of tax duties. Ignorance is negligence and negligence is subject to penalty. As such, the Department finds the penalty proper and denies the penalty protest.

FINDING

The taxpayer's penalty protest is denied.

DEPARTMENT OF STATE REVENUE

0220030315P.LOF

LETTER OF FINDINGS NUMBER: 03-0315P
Income Tax
For the Year 1999-2000

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration- Ten Per Cent (10%) Negligence Penalty

Authority: IC 6-8.1-10-2.1, IC 6-8.1-5-1 (b), 45 IAC 15-11-2 (b).

The taxpayer protests the imposition of the ten percent (10%) negligence penalty.

STATEMENT OF FACTS

The taxpayer is a warehouse processing business that managed third party merchandise. After an audit, the Indiana Department of Revenue, hereinafter referred to as the "department," assessed income tax, interest, and penalty. The taxpayer paid a portion of the assessment and protested the imposition of the ten percent (10%) negligence penalty. Although given ample opportunity to do so, the taxpayer did not request a hearing or submit additional documentation. Therefore, this Letter of Findings is based on the contents of the file.

I. Tax Administration- Ten Percent (10%) Negligence Penalty

DISCUSSION

The taxpayer protests the imposition of the ten percent (10%) negligence penalty pursuant to IC 6-8.1-10-2.1. All tax assessments are presumed to be accurate and the taxpayer bears the burden of proving that any assessment is incorrect. IC 6-8.1-5-1 (b).

The taxpayer contends that the negligence penalty is inappropriate in this situation since it did not intentionally disregard the law. The taxpayer bases this contention on a discussion with a department employee prior to the filing of the tax returns. The taxpayer argues that since it discussed the instant situation with the department employee prior to its filing, there was no negligence involved.

Indiana Regulation 45 IAC 15-11-2 (b) clarifies the standard for the imposition of the negligence penalty as follows:

Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the

listed tax laws, rules and/or regulations is treated as negligence. Further, failure to reach and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer.

The taxpayer submitted a copy of the letter it sent to the department with the subject tax return. That letter indicates that the taxpayer was in contact with the department over a different issue. At some time during the discussions on the other issue, the taxpayer discussed this matter with a department employee. The submitted letter does not indicate the circumstances, context, or gist of the conversation. This letter is not adequate evidence that the taxpayer was attentive to its duties and followed the department's instructions in the preparation of this tax return. The taxpayer did not sustain its burden of proving that it was not negligent in this matter.

FINDING

The taxpayer's protest is denied.

DEPARTMENT OF STATE REVENUE

0420020064.LOF

LETTER OF FINDINGS: 02-0064
Gross Retail Tax
For the Years 1998 and 1999

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of the document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUES

I. Construction Contracts – Gross Retail Tax.

Authority: IC 6-2.5-1-1; IC 6-2.5-1-2; IC 6-2.5-2-1(a); IC 6-2.5-4-1(b); IC 6-2.5-4-1(e); Cowden & Sons Trucking, Inc. v. Indiana Dept. of State Revenue, 575 N.E.2d 718 (Ind. Tax Ct. 1991); 45 IAC 2.2-3-7; 45 IAC 2.2-3-7(a); 45 IAC 2.2-3-7(b); 45 IAC 2.2-3-8(b); 45 IAC 2.2-3-12(e).

Taxpayer challenges the decision by the Department of Revenue (Department) resulting in an assessment of uncollected gross retail (sales) tax on the proceeds received from certain construction and installation contracts.

II. Abatement of the Ten-Percent Negligence Penalty.

Authority: IC 6-8.1-10-2.1; IC 6-8.1-10-2.1(d); 45 IAC 15-11-2(b); 45 IAC 15-11-2(c).

Taxpayer requests that the Department exercise its discretion to abate entirely the ten-percent negligence penalty.

STATEMENT OF FACTS

Taxpayer is a carpenter/contractor. Taxpayer builds items such as kitchen cabinets, entertainment centers, and bookcases and sells those completed items to customers. Taxpayer also enters into agreements for the construction and installation of items in which some of the construction work is completed off-site, and some of the work is completed at the customer's own location.

The Department conducted an audit of taxpayer's business and tax records. On the basis of that audit review, the Department concluded that taxpayer was entering into "unitary contracts" for which sales tax should have been collected on the total amount. Having failed to do so, the Department assessed taxpayer an amount for the uncollected sales tax.

Taxpayer disagreed with the audit's conclusions and submitted a protest to that effect. An administrative hearing was conducted, taxpayer explained the basis for his protest, and this Letter of Findings results.

DISCUSSION

I. Construction Contracts – Gross Retail Tax.

Pursuant to IC 6-2.5-2-1(a), Indiana imposes a sales tax on all retail transactions made in this state. IC 6-2.5-4-1(b) defines a "retail transaction" as the acquisition of tangible personal property by a retail merchant for the purpose of resale and subsequent transfer of that property to another for consideration. A retail transaction is defined as "selling at retail." "Selling at retail" is defined in IC 6-2.5-4-1(b).

A person is engaged in selling at retail when, in the ordinary course of his regularly conducted trade or business, he: (1) acquires tangible personal property for the purpose of resale; and (2) transfers that property to another person for consideration.

Since the sales and use tax statutes specifically state that the transfer of tangible personal property is taxable, by implication the transfer of services is not taxable. Except for certain enumerated services, the provision of services is not considered a "retail transaction" and the cost of such services is not subject to sales tax.

There are two instances in which the otherwise nontaxable sale of a service is subject to sales tax. The first is when the services are performed with respect to tangible personal property being transferred in a retail transaction, and the services take place before

the transfer of the tangible personal property. IC 6-2.5-4-1(e) states that "[t]he gross retail income received from selling at retail is only taxable... to the extent that the income represents: (1) the price of the property transferred, without the rendition of any service: and (2)... any bona fide charges which are made for preparation, fabrication, alteration, modification, finishing, completion, delivery or *other service performed in respect to the property transferred before its transfer* and which are separately stated on the transferor's records." For example, the entire purchase price of an automobile is subject to sales tax even though the total price includes both the cost of materials (steel, nuts, bolts, glass) and the cost of services (labor, delivery charges) because the automobile manufacturer's services are all performed up-stream of the retail transaction.

The second exception is when the cost of services is part of a "unitary transaction." IC 6-2.5-1-2. A "unitary transaction" is defined as a transaction that includes the transfer of tangible personal property and provision of services for a single charge pursuant to a single agreement or order. IC 6-2.5-1-1. For example, if a customer hires a vendor to install telephone equipment in the customer's office and the vendor – having completed the installation work – presents a bill for $500, the entire $500 is subject to sales tax. The parties' agreement to install the telephone equipment constitutes a "unitary transaction" even though the parties intended the agreement to cover both the installation work and the telephones. However, in Cowden & Sons Trucking, Inc. v. Indiana Dept. of State Revenue, 575 N.E.2d 718, 722 (Ind. Tax Ct. 1991), the Tax Court stated that "the legislature intends to tax services rendered in retail unitary transactions only if the transfer of property and the rendition of services is inextricable and indivisible."

A. Unitary Transactions:

Therefore, when taxpayer sells a customer an item such a custom-built furniture or a completed kitchen countertop, the taxpayer is engaged in a unitary transaction, and the entire cost is subject to sales tax. Any service or labor costs which are attributable to the cost of the furniture or the countertop were incurred before the item was transferred to the customer. The customer is purchasing a completed item – the furniture or the countertop – which has a unique and indivisible value to that customer. In such a transaction, the taxpayer is acting as a retail merchant, is engaged in a retail transaction, and must collect sales tax on the total price of the item. The fact that taxpayer may present the customer a bill which separately states the cost of the labor and the materials expended in building the furniture or the countertop is irrelevant. There is no indication that the taxpayer and his customers – in this category of transactions – bargain for the service or labor costs. Rather, these transactions are similar to the purchase of an automobile. The fact that the auto manufacturer presents a bill which states separately the cost of the raw materials and the upstream labor costs would be equally irrelevant because the car customer and the car dealer have entered into a unitary transaction. The car dealer must collect sales tax on the entire cost of the vehicle even if much of that cost is attributable to labor.

Each transfer of a completed, ready-to-install cabinet – from taxpayer's workshop to the customer's location – constitutes an up-front, severable "unitary transaction" consisting of both the initial labor costs in building the cabinet and the materials used to build those cabinets. Taxpayer must charge sales tax on the both the labor expended and the material acquired up to the time that taxpayer completes construction and delivery of the cabinets because the transfer of each completed, ready-to-install unit constitutes a unitary transaction. Taxpayer must collect sales tax on the entire cost of each cabinet, entertainment center, or any other completed item he constructs for one of his customers.

B. Construction Contracts:

However, taxpayer also performs on-site carpentry work for customers. In these types of transactions, taxpayer brings raw, unfinished materials – wood, nails, finishing lumber – to a customer's location and completes the work at that location. Taxpayer provides the raw materials, performs the work at the customer's location, and presents a bill which distinguishes between the cost of the installed materials and the cost of the labor. Under these circumstances, taxpayer is not acting as a "retail merchant" but falls within the definition of a "contractor." 45 IAC 2.2-3-7(a) states that, "For purposes of this regulation... 'contractor' means any person engaged in converting construction materials into realty. The term 'contractor' refers to general or prime contractors, subcontractors, and specialty contractors including.... persons engaged in building, cement work, carpentry, plumbing, heating, electrical work, roofing, wrecking, excavating, plastering, tile and road construction."

The raw materials taxpayer brings to the construction site – the wood, fasteners, paint – fall within the definition of "construction materials" as defined under 45 IAC 2.2-3-7 because the materials constitute "tangible personal property... used for incorporation in or improvement of a facility or structure constituting or becoming part of the land on which such facility or structure is situated." 45 IAC 2.2-3-7(b).

The cost of these construction materials is subject to sales tax. "All construction material purchased by a contractor is taxable either at the time of purchase, or if purchased exempt (or otherwise acquired exempt) upon disposition unless the ultimate recipient could have purchased it exempt." 45 IAC 2.2-3-8(b). Therefore, unless taxpayer's customer is itself – exempt – a church or otherwise legitimately exempt organization – taxpayer must collect sales tax on the raw materials he brings to and incorporates into the customer's building. Assuming he did not pay sales tax at the time he acquired the raw materials, taxpayer must collect sales tax on the baseboard he fastens to a customer's walls; taxpayer must collect sales tax on the glue he uses to fasten a countertop to a customer's kitchen cabinets; taxpayer must collect sales tax on the fasteners he uses to install the treads on a customer's stairway. However, in these instances, taxpayer is not necessarily required to collect sales tax on the labor involved. 45 IAC 2.2-3-12(e) states that, "A person selling tangible personal property to be used as an improvement to real estate may enter into a completely separate

contract to furnish the labor to install or construct such improvement, in which case the sales tax shall be collected and remitted by such seller on the materials sold for this purpose. Such sale of materials must be identifiable as a separate transaction from the contract for labor." Therefore, if taxpayer – at the time of the transaction – furnishes a bill for the cost of the materials incorporated into the customer's realty and separately states on that bill the cost of the related labor, taxpayer is relieved of the requirement to collect sales tax on the labor portion of the bill. However, taxpayer is cautioned that under these circumstances, "The fact that the seller subsequently furnishe[s] information regarding the charges for labor and material under a flat bid quotation shall not be considered to constitute separate transactions for labor and material." 45 IAC 2.2-3-12(e).

In sum, the audit report correctly determined that taxpayer was responsible for collecting sales tax on each unitary transaction and that taxpayer was responsible for collecting sales tax on the material portion of construction contracts.

FINDING

Taxpayer's protest is respectfully denied.

II. Abatement of the Ten-Percent Negligence Penalty.

Taxpayer asks the Department to exercise its discretion and abate the ten-percent negligence penalty.

IC 6-8.1-10-2.1 requires that a ten-percent penalty be imposed if the tax deficiency results from the taxpayer's negligence. Departmental regulation 45 IAC 15-11-2(b) defines negligence as "the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer." Negligence is to "be determined on a case-by-case basis according to the facts and circumstances of each taxpayer." Id.

IC 6-8.1-10-2.1(d) allows the Department to waive the penalty upon a showing that the failure to pay the deficiency was based on "reasonable cause and not due to willful neglect." Departmental regulation 45 IAC 15-11-2(c) requires that in order to establish "reasonable cause," the taxpayer must demonstrate that it "exercised ordinary business care and prudence in carrying out or failing to carry out a duty giving rise to the penalty imposed...."

The Department agrees with taxpayer that the positions it took in regard to its Indiana sales tax liabilities – however erroneous – were indicative of "reasonable cause and not due to willful neglect."

FINDING

Taxpayer's protest is sustained.

DEPARTMENT OF STATE REVENUE

0420020279.LOF

LETTER OF FINDINGS: 02-0279
Gross Retail Tax
For 1998, 1999, and 2000

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of the document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Prepaid Telephone Calling Cards – Gross Retail Tax.

Authority: IC 6-2.5-2-1(a); IC 6-2.5-2-1(b); IC 6-2.5-4-1(b); IC 6-2.5-4-5; IC 6-2.5-4-6; IC 6-2.5-4-13; IC 6-8.1-3-3; IC 6-8.1-3-3(b); IC 6-8.1-5-1(b).

Taxpayer challenges the Department of Revenue's decision requiring taxpayer to pay gross retail (sales) tax on the amount of money it received from selling prepaid telephone calling cards.

STATEMENT OF FACTS

Taxpayer is in the business of selling prepaid telephone calling cards. Taxpayer sells the cards at wholesale to various retail outlets. Taxpayer also sells the cards directly to consumers by means of vending machines owned by the taxpayer.

The Department of Revenue (Department) conducted an audit of taxpayer's business records. The audit report concluded that taxpayer should have been collecting Indiana sales tax on the money received from its vending machines sales.

The taxpayer challenged the assessment of sales tax and submitted a protest to that effect. An administrative hearing was held, and this Letter of Findings follows.

DISCUSSION

I. Prepaid Telephone Calling Cards – Gross Retail Tax.

Taxpayer challenges the assessment of sales tax on the ground that it never received notice that is was required to collect sales tax from its vending machine customers. In addition, taxpayer obliquely suggests is it entitled to an exemption from collecting sales tax because it was acting as a "public utility" in selling the telephone cards.

Pursuant to IC 6-2.5-2-1(a), Indiana imposes a sales tax on all retail transactions made in this state. IC 6-2.5-4-1(b) defines a "retail transaction" as the acquisition of tangible personal property by a retail merchant for the purpose of resale and subsequent transfer of that property to another for consideration. A retail transaction is defined as "selling at retail" and someone who engages in such a transaction is a "retail merchant." "Selling at retail" is defined in IC 6-2.5-4-1(b) which states:

A person is engaged in selling at retail when, in the ordinary course of his regularly conducted trade or business, he: (1) acquires tangible personal property for the purpose of resale; and (2) transfers that property to another person for consideration.

The sales tax statutes specifically exempt certain transactions. Elsewhere, the legislature has avoided any potential ambiguity by specifically designating certain vendors as "retail merchants." IC 6-2.5-4-13 states:

A person is a retail merchant making a retail transaction when a person sells:

(1) a prepaid telephone calling card at retail;
(2) a prepaid telephone authorization number at retail;
(3) the reauthorization of a prepaid telephone calling card; or
(4) the reauthorization of a prepaid telephone number.

A. Prospective Treatment.

Taxpayer argues that it is entitled to prospective treatment of the audit's determination that it should have been collecting sales tax on its vending machine sales. According to taxpayer, it is entitled to this prospective treatment because taxpayer "had received no notice of implementation of this tax or how to calculate, collect and/or remit the same" until the time that the Department conducted the audit investigation.

IC 6-2.5-4-13 was drafted by the state legislature as Ind. Pub. L. No. 8-1998 indicating that the law – as presently implemented – was placed into effect shortly before or during the time considered in the audit examination. Taxpayer is correct in its general assertion that, under IC 6-8.1-3-3, the Department is without authority to reinterpret a taxpayer's tax liability without promulgating and publishing a regulation giving taxpayer notice of that reinterpretation. IC 6-8.1-3-3(b) states that "[n]o change in the department's interpretation of a listed tax may take effect before the date the change is: (1) adopted in a rule under this section; or (2) published in the Indiana Register...."

However, IC 6-8.1-3-3(b) provides the taxpayer no relief because the Department has done nothing which "reinterpret[s]" taxpayer's sales tax liability. The legislature chose to implement IC 6-2.5-4-13 in the form, in the manner, and at the time it did. There is nothing which imposes a duty on either the legislature or the Department to inform Indiana residents – individually or collectively – of their responsibility under the state's tax laws. To the contrary, the law imposes upon a businessperson the exclusive responsibility for collecting and remitting sales tax. "The person who acquires property in a retail transaction is liable for the tax on the transaction and, except as otherwise provided in this chapter, shall pay the tax to the retail merchant as a separate added amount to the consideration in the transaction. *The retail merchant shall collect the tax as agent for the state.*" IC 6-2.5-2-1(b) (*Emphasis added*). The language of the statute could not be more direct; a customer *shall* pay sales tax, and the retail merchant *shall* collect that tax on behalf of the state. There is nothing in this language permitting business persons to avoid his or her responsibility on the ground that that they were unaware of the law for three years.

B. Utility Exemption.

Taxpayer suggests that it is entitled to a sales tax exemption on the ground that it is a "public utility." *See* IC 6-2.5-4-5; IC 6-2.5-4-6.

IC 6-8.1-5-1(b) in part provides that, "The notice of proposed assessment is prima facie evidence that the department's claim for the unpaid tax is valid. The burden of proving that the proposed assessment is wrong rests with the person against whom the proposed assessment is made."

Taxpayer's exemption argument is not well-taken because it has provided nothing which would indicate that it is a "public utility" or that a "public utility" in the business of selling prepaid telephone cards would be exempt from collecting and remitting sales tax. Under IC 6-8.1-5-1(b), taxpayer has not met its burden of demonstrating that it is a public utility or that its activities do not fall under the specific provisions of IC 6-2.5-4-13.

When taxpayer uses its vending machines to sell prepaid telephone cards, it is acting as a "retail merchant," is engaged in "selling at retail," and it should have been collecting sales tax on the vending machine transactions.

FINDING

Taxpayer's protest is respectfully denied.

DEPARTMENT OF STATE REVENUE

04-20020100.LOF

LETTER OF FINDINGS NUMBER: 02-0100
SALES AND USE TAX

For Years 1998 and 1999

NOTICE: Under Ind. Code § 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUES

I. Sales/Use Tax—Best information available; failure to maintain adequate records

Authority: IC 6-8.1-5-1(a); IC 6-8.1-5-4(a); IC 6-8.1-5-4(c) IC 6-8.1-5-1(b).

Taxpayer argues that the proposed assessment should be reduced because, in the taxpayer's opinion, the auditor's assessment, which was based on the best information available, was unreasonable. Taxpayer contends that the majority of the expenses that were considered to be non-exempt by the auditor were, in fact, for exempt uses. However, taxpayer failed to maintain adequate business records.

STATEMENT OF FACTS

Taxpayer was acquired as part of a corporate merger in August of 1999. Before the merger, taxpayer owned a facility in Indiana that was one of five such facilities owned by the taxpayer in the United States. After the merger, few records existed for the no-longer-existent taxpayer. Because no records were available, the auditor made use of the best records available, which included the taxpayer's federal and state income tax returns. Taxpayer filed its final Indiana return in 1999. The Indiana facility was closed in 2000.

I. Sales/Use Tax—Best information available; failure to maintain adequate records

DISCUSSION

If the department reasonably believes that a person has not reported the proper amount of tax due, the department shall make a proposed assessment of the amount of the unpaid tax on the basis of the best information available to the department. IC 6-8.1-5-1(a). Every person subject to a listed tax must keep books and records so that the department can determine the amount, if any, of the person's liability for that tax by reviewing those books and records. IC 6-8.1-5-4 (a). A person must allow inspection of the books and records and returns by the department or its authorized agents at all reasonable times. IC 6-8.1-5-4 (c). The notice of proposed assessment is prima facie evidence that the department's claim for the unpaid tax is valid. The burden of proving that the proposed assessment is wrong rests with the person against whom the proposed assessment is made. IC 6-8.1-5-1(b).

Taxpayer freely admits that it has no documentation aside from what was relied upon by the auditor that would tend to prove the assessment to be in error. Because the taxpayer cannot meet its burden of proof in overcoming the presumption by the proposed assessment, the information that the auditor relied upon will be deemed sufficient as the best information available.

FINDINGS

The taxpayer is respectfully denied.

DEPARTMENT OF STATE REVENUE

0420020532.LOF

LETTER OF FINDINGS NUMBER: 02-0532
SALES & USE TAX
For The Tax Periods: 1999 -2001

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Sales Tax – Markup for long distance calls

Authority: IC 6-2.5-2-1, IC 6-2.5-4-6, IC 6-2.5-4-4, *Greensburg Motel v. Dept. of State Revenue*, 629 N.E.2d 1302 (Ind. Tax 1994.

The Taxpayer protests the Department's assessment of sales tax on the markup of long distance telephone services offered to its guests.

STATEMENT OF FACTS

Taxpayer is in the business of providing guest accommodations for periods of less than 30 days. As part of its hotel operations, Taxpayer purchases telephone services from both a local carrier and a long distance carrier and passes these services through to its guests. The guests are not charged for local calls, however they are billed for long distance calls based on the length, location, and time of call. They are billed in a single un-segregated amount which includes Taxpayer's cost plus a markup.

During the audit, the auditor made adjustments after she determined that Taxpayer failed to include in taxable sales the long

distance markup billed to the customer. More facts supplied as necessary.

I. Sales Tax: Markup for long distance calls

DISCUSSION

During the audit, the auditor found that Taxpayer failed to include in taxable sales the long distance markup for telephone calls billed to the customer. Taxpayer argues that the markup contains additional costs on which sales tax has been paid.

"An excise tax, known as the state gross retail tax, is imposed on retail transactions made in Indiana," IC 6-2.5-2-1. Also, IC 6-2.5-4-6 provides:

(a) As used in this section, "telecommunication services" means the transmission of messages or information by or using wire, cable, fiber-optics, laser, microwave, radio, satellite, or similar facilities. The term does not include value added services in which computer processing applications are used to act on the form, content, code, or protocol of the information for purposes other than transmission.

(b) A person is a retail merchant making a retail transaction when the person:

(1) furnishes or sells an intrastate telecommunication service; and

(2) receives gross retail income from billings or statements rendered to customers.

(c) Notwithstanding subsection (b), a person is not a retail merchant making a retail transaction when:

(1) The person provides, installs, construct, services, or removes tangible personal property which is used in connection with the furnishing of the telecommunication services described in subsection (a); or

(2) The person furnishes or sells the telecommunication services described in subsection (a) to another person described in this section or in section 5 of this chapter.

It is clear Taxpayer does not transmit messages, but, rather simply purchases telecommunication services from the long distance carrier and, in turn, permits guest to access the telecommunication services for a fee. Taxpayer, as purchaser rather than a seller of intrastate telecommunication services, is required to pay sales/use tax on telecommunication services purchased pursuant to the above referenced IC 6-2.5-2-1 and IC 6-2.5-4-6.

The fee charged by Taxpayer to its guests for access to the telecommunications services is also subject to sales/use tax to be collected by Taxpayer as provided by IC 6-2.5-4-4 and 45 IAC 2.2-4-8. 45 IAC 2.2-4-8, interpreting IC 6-2.5-4-4, states that every person renting or furnishing rooms, lodgings or other accommodations for periods of less than thirty (30) days must collect the gross retail tax on the gross receipts from such transactions. It further states,

> The gross receipts subject to tax include the amount which represents consideration for the rendition of these services which are essential to the furnishing of the accommodation, and those services which are regularly provided in furnishing the accommodation. Such amounts are subject to tax even when they are separately itemized on the statement or invoice. *Id.*

In this case, Taxpayer's provision of access to telephone services for its guests is a service regularly provided in furnishing an accommodation by Taxpayer, hence, the fee for this is defined as gross receipts received from furnishing accommodations for periods of less than thirty (30) days and is subject to sales/use tax. While Taxpayer must pay sales/use tax to the telecommunications provider, they are not required to collect sales tax on the reimbursement of the long distance charge. However, the markup is considered to be a service charge that is in fact essential to and regularly provided in the furnishing of the accommodation. As such, the markup charge on long distance telephone calls is subject to the collection of sales tax.

Taxpayer contends that a portion of the markup consists of other costs such as call accounting software, special computers, telephone equipment and wiring which sales tax was also paid. They state that this is tax pyramiding and that only the markup minus these associated costs should be taxed.

In *Greensburg Motel v. Dept. of State Revenue*, 629 N.E.2d 1302 (Ind. Tax 1994), the taxpayer, who was a motel owner and operator, argued that tax pyramiding occurs in its industry because they are providing a taxable service and are not exempt from sales tax on their purchases of consumable items, non-consumable items, and utilities. The Court stated, "Not every purchase incorporated into service is exempt from sales tax."

While IC 6-2.5-4-6(c) explicitly excludes Taxpayer as a retail merchant making a retail transaction for providing telecommunications services, there is no such provision for Taxpayer with regards to the additional costs associated with the long distance service.

FINDING

The Taxpayer's protest is respectfully denied.

DEPARTMENT OF STATE REVENUE

0420030232P.LOF

LETTER OF FINDINGS NUMBER: 03-0232P
Sales Tax

For the Month December 2002

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration – Penalty

Authority: IC 6-8.1-10-2.1(d); 45 IAC 15-11-2

The taxpayer protests the late penalty.

STATEMENT OF FACTS

The late penalty was assessed on a monthly sales tax filing for the month of December 2002.

The taxpayer is a retailer of luggage and gifts. The taxpayer is headquartered out-of-state.

I. Tax Administration – Penalty

DISCUSSION

The taxpayer requests the penalty assessment be waived as the error was the result of using the wrong date. Furthermore, the taxpayer asks for waiver as the taxpayer has been timely in the past.

The Department says the taxpayer was late ten days. The taxpayer has been deemed an early filer where the due date of the monthly sales tax return is on the 20th of the month. In regard to the month in question, the taxpayer's monthly tax return was postmarked the 30th, ten days late.

45 IAC 15-11-2(b) states, "Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer."

The Department finds the taxpayer did not act with reasonable care in that the taxpayer was inattentive to tax duties. Inattention is negligence and negligence is subject to penalty. As such, the taxpayer's penalty protest is denied.

FINDING

The taxpayer's penalty protest is denied.

DEPARTMENT OF STATE REVENUE

04-20030258P.LOF

LETTER OF FINDINGS NUMBER: 03-0258P
Tax Administration—Penalty
Tax Administration—Interest
For the Years 2000 & 2001

NOTICE: Under Ind. Code § 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUES

I. Tax Administration—Penalty

Authority: 45 IAC 15-11-2

Taxpayer protests the 10% negligence penalty.

II. Tax Administration—Interest

Authority: IC § 6-8.1-10-1

Taxpayer protests the interest levied upon the base use tax owed to the Department.

STATEMENT OF FACTS

Taxpayer is a contractor who installs in-ground pools on a lump sum contract basis. Taxpayer also sells pool materials and supplies at retail.

The penalty was proposed in the first instance because the auditor determined taxpayer had not self-assessed and remitted use tax even though taxpayer was aware of its duty to do so. The current audit, taxpayer's first, assessed additional use tax because, although taxpayer has a use tax accrual program, a significant number of invoices showed no use tax was accrued. Further, taxpayer

also collected sales tax on a pool package for materials only, but did not report the sales tax and did not remit the sales tax collected.

I. Tax Administration-Penalty

DISCUSSION

Penalty assessments depend on a number of factors outlined in the statute and regulation cited *supra*, and can be waived based on a showing of sufficient cause:

Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer.

The Department finds the taxpayer did not act with reasonable care in that taxpayer did not report a sale as taxable even though taxpayer collected sales tax on the transaction. Taxpayer did not remit the sales tax collected. Taxpayer admits making mistakes; that admission is an admission of negligence. The Department denies taxpayer's request to abate the 10% penalty assessment.

FINDING

Taxpayer's request to abate the 10% negligence penalty is denied.

II. Tax Administration—Interest

DISCUSSION

Interest is imposed by statute, and cannot be waived.

FINDING

Taxpayer's request to abate the interest on the assessment is denied.

DEPARTMENT OF STATE REVENUE

04-20030265P.LOF

LETTER OF FINDINGS NUMBER: 03-0265P
Tax Administration—Penalty
For the Years 2000 & 2001

NOTICE: Under Ind. Code § 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUES

I. Tax Administration—Penalty

Authority: 45 IAC 15-11-2

Taxpayer protests the 10% negligence penalty.

STATEMENT OF FACTS

The penalty was proposed in the first instance because the auditor determined taxpayer did not report and pay the required use tax on its purchases of fixed assets and operating expenses as required.

Taxpayer is a subsidiary of a corporate group whose parent is a foreign corporation. The parent's principal line of business is to serve the investment and capital needs of individuals and institutional clients through its broker-dealer subsidiaries such as taxpayer.

I. Tax Administration-Penalty

DISCUSSION

Penalty assessments depend on a number of factors outlined in the regulation cited *supra*, and can be waived based on a showing of sufficient cause:

Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer.

The Department finds the taxpayer did not act with reasonable care in that taxpayer did not accrue and pay use tax on purchases of fixed assets and operating expenses as required. The Department denies taxpayer's request to abate the 10% penalty assessment.

FINDING

Taxpayer's request to abate the 10% negligence penalty is denied.

DEPARTMENT OF STATE REVENUE

0420030272P.LOF

LETTER OF FINDINGS NUMBER: 03-0272P
SalesTax
For the Years 2000-2001

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration- Ten Percent (10%) Negligence Penalty

Authority: IC 6-8.1-10-2.1, 45 IAC 15-11-2 (b).

The taxpayer protests the imposition of the ten percent (10%) negligence penalty.

STATEMENT OF FACTS

The taxpayer is a Sub-Chapter S corporation that operates a guest ranch and leases grazing rights and cattle. After an audit, the Indiana Department of Revenue, hereinafter referred to as the "department," assessed additional sales and use tax, interest, and penalty. The taxpayer paid a portion of the assessment and protested the imposition of the ten percent (10%) negligence penalty. Although given ample opportunity to do so, the taxpayer did not request a hearing or submit additional documentation. Therefore, this Letter of Findings is based on the contents of the file.

I. Tax Administration- Ten Percent (10%) Negligence Penalty

DISCUSSION

The taxpayer protests the imposition of the ten percent (10%) negligence penalty pursuant to IC 6-8.1-10-2.1. The taxpayer contends that the negligence penalty is inappropriate in this situation because the taxpayer did not intentionally fail to pay the proper amount of tax.

Indiana Regulation 45 IAC 15-11-2 (b) clarifies the standard for the imposition of the negligence penalty as follows:

> Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to reach and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer.

The department's standard for the negligence penalty, as stated in the regulation, is significantly lower than intentional nonpayment of tax as argued by the taxpayer. Rather, the penalty can be properly imposed when the taxpayer is inattentive to its duties or disregards department's instructions. In this case, the taxpayer repeatedly failed to pay tax on a clearly taxable tractor and feed and salt blocks for the animals not used for an agricultural purpose. This failure to follow departmental instructions constitutes negligence.

FINDING

The taxpayer's protest is denied.

DEPARTMENT OF STATE REVENUE

0420030301P.LOF

LETTER OF FINDINGS NUMBER: 03-0301P
Sales & Use tax
For the Month of December 2002

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superceded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration – Penalty

Authority: IC 6-8.1-10-2.1(d); 45 IAC 15-11-2

The taxpayer protests the late payment penalty.

II. Tax Administration – Interest

Authority: IC 6-8.1-10-1

The taxpayer protests the interest assessment.

STATEMENT OF FACTS

The late payment penalty and interest was assessed on the late filing of a monthly sales tax return.

The taxpayer is a company located out-of-state.

I. Tax Administration – Penalty

DISCUSSION

The taxpayer argues the late penalty should be waived as logically the check was received by the Department on or before the filing deadline. The taxpayer shows that the check was deposited by the Department on January 31st, one day after the filing deadline. The taxpayer says that logic indicates the check would have been received by the Department at least the day before the deposit date.

The Department points out that the postmark date is January 31, 2003. Thus, the filing of the sales tax return was one day late.

45 IAC 15-11-2(b) states, "Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer."

The Department finds the taxpayer was inattentive to tax duties. Inattention is negligence and negligence is subject to penalty. As such, the Department finds the penalty proper and denies the penalty protest.

FINDING

The taxpayer's penalty protest is denied.

II. Tax Administration – Interest

DISCUSSION

The taxpayer protests the interest assessment.

IC 6-8.1-10-1 does not allow the waiver of interest. As such, the Department finds the assessment of interest proper and denies the interest protest.

FINDING

The taxpayer's interest protest is denied.

DEPARTMENT OF STATE REVENUE

0320030279P.LOF

LETTER OF FINDINGS NUMBER: 03-0279P
Withholding Tax
For the Months January 1, 2002 thru January 31, 2003

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superceded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration – Penalty

Authority: IC 6-8.1-10-2.1(d); 45 IAC 15-11-2

The taxpayer protests the late penalty.

STATEMENT OF FACTS

The late penalty was assessed for the late filing of monthly withholding tax returns for the period January 1, 2002 thru January 31, 2003.

The taxpayer is a corporation domiciled in Indiana.

I. Tax Administration – Penalty

DISCUSSION

The taxpayer requests the penalty be waived as the error is the result of an incompetent employee.

The Department points out that Federal regulations (to which the State of Indiana follows in this instance) state a taxpayer has control of an employee's performance and dereliction of duty on behalf of the employee is the responsibility of the taxpayer.

45 IAC 15-11-2(b) states, "Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution,

or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer."

The Department finds the taxpayer was inattentive of tax duties. Inattention is negligence and negligence is subject to penalty. As such, the Department finds the penalty proper and denies the penalty protest.

FINDING

The taxpayer's penalty protest is denied

DEPARTMENT OF STATE REVENUE

0320030299P.LOF

LETTER OF FINDINGS NUMBER: 03-0299P
Withholding Tax
For the Monthly Periods of January thru April 2003

NOTICE: Under IC 4-22-7-7, this document is required to be published in the Indiana Register and is effective on its date of publication. It shall remain in effect until the date it is superseded or deleted by the publication of a new document in the Indiana Register. The publication of this document will provide the general public with information about the Department's official position concerning a specific issue.

ISSUE

I. Tax Administration – Penalty

Authority: IC 6-8.1-10-2.1(d); 45 IAC 15-11-2

The taxpayer protests the late payment penalty.

II. Tax Administration – Interest

Authority: IC 6-8.1-10-1

The taxpayer protests the interest assessment.

STATEMENT OF FACTS

The late payment penalty was assessed on the late filing of monthly withholding tax returns.

The taxpayer is a corporation headquartered out-of-state.

I. Tax Administration – Penalty

DISCUSSION

The taxpayer argues the late penalty should be waived as the coupon book was not received in the mail by the taxpayer until mid-2003.

The Department points out the BT-1 business application that the taxpayer sent to the Department was incomplete. The BT-1 application did not have the required information of the associates. On April 24, 2003 the Department requested the required information from the taxpayer. When the information was received, the coupon books were sent to the taxpayer.

45 IAC 15-11-2(b) states, "Negligence, on behalf of a taxpayer is defined as the failure to use such reasonable care, caution, or diligence as would be expected of an ordinary reasonable taxpayer. Negligence would result from a taxpayer's carelessness, thoughtlessness, disregard or inattention to duties placed upon the taxpayer by the Indiana Code or department regulations. Ignorance of the listed tax laws, rules and/or regulations is treated as negligence. Further, failure to read and follow instructions provided by the department is treated as negligence. Negligence shall be determined on a case by case basis according to the facts and circumstances of each taxpayer."

The Department finds the error in this case to be the error of the taxpayer in that the taxpayer did not complete all of the required information on the BT-1 business application. As such, the Department finds the taxpayer was inattentive to tax duties. Inattention is negligence and negligence is subject to penalty. As such, the Department finds the penalty proper and denies the penalty protest.

FINDING

The taxpayer's penalty protest is denied.

II. Tax Administration – Interest

DISCUSSION

The taxpayer protests the interest assessment.

IC 6-8.1-10-1 does not allow the waiver of interest. As such, the Department finds the assessment of interest proper and denies the interest protest.

FINDING

The taxpayer's interest protest is denied.

THE INDIANA STATE PLAN TO IMPLEMENT THE HELP AMERICA VOTE ACT OF 2002
A BLUEPRINT FOR INDIANA ELECTIONS

Todd Rokita
Indiana Secretary of State

"With this blueprint for Indiana's elections we have set in motion the most comprehensive voting reforms in our state since the Voting Rights Act of 1965. With state of the art voting systems, a statewide voter registration system, and creative solutions like provisional balloting, Indiana will be well positioned to administer all elections as fairly and efficiently as possible to preserve the rights of all Hoosiers and help ensure that every legitimate vote is counted accurately."

Todd Rokita

Dear Indiana citizens:

The Help America Vote Act of 2002 (HAVA) is the most significant federal voting reform measure since the Voting Rights Act of 1965. In Indiana, we have already been working over the last year and a half on many of the reforms now required by HAVA.

In February of 2003, I convened the Vote Indiana Team, a diverse group of 28 Hoosiers, to help create the blueprint for our elections for the next five years and beyond. The Vote Indiana Team members come from across the state and represent three political parties, the state legislature, minority groups, military voters, people with disabilities, county election and voter registration officials, and the media.

The Vote Indiana Team met over a six-month period as a full group and in smaller working groups to address specific issues and draft a comprehensive election reform plan for Indiana that implements the requirements of HAVA. After five meetings of the Vote Indiana Team as a whole and twenty-four singularly focused sub-group meetings, the Indiana State Plan is now available to you and all Hoosiers.

As voters, the changes you'll see at the polls over the next few years will be significant. Indiana will be replacing punch card and lever machine voting systems still in use in 32 counties. An accessible voting machine will be placed in every voting location in Indiana. The creation of a statewide voter registration database will allow election officials in every county to communicate with each other, as well as with officials from the Indiana Bureau of Motor Vehicles and the Departments of Health and Correction. The statewide voter registration system will ensure that every voter is registered at the proper location and only the proper location.

These improvements, along with advances in technology, will help ensure the voting rights of all Hoosiers are protected and will position Indiana as a nationwide model for election success and reliability.

None of these changes would be possible without the cooperation, coordination and continued hard work of Indiana's county clerks, election board members, and voter registration officials. I also want to thank the Vote Indiana Team for their generous time and effort in putting forth these recommendations.

I look forward to continuing to serve you as Indiana's chief election official and as Secretary of State. I am committed to making sure that Indiana's elections are efficient, accurate and fair.

Yours truly,

Todd Rokita
Indiana Secretary of State

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Executive Summary

Indiana has a population of 6,100,000 (2002 estimate), with a voting age population of 4,448,000 (2000 estimate used for purposes of HAVA). Of this population, 4,008,636 were registered to vote as of the November 2002 general election.

Election Administration in Indiana

The Secretary of State serves as Indiana's chief election official. The Indiana Election Division (IED) is established within the Office of the Secretary of State. The Governor appoints the IED's two co-directors from lists of two or more persons submitted by the state's Democratic and Republican parties. The IED assists the Secretary of State and the Indiana Election Commission (IEC) with the administration of elections. Indiana's local government includes election administration and voter registration offices in each of the state's 92 counties. Each county is divided into election precincts, with a total of 5,602 precincts in Indiana. All 92 counties have a circuit court clerk elected by the voters and a county election board, which includes the circuit court clerk, to administer local elections.

In 2000, the Bipartisan Task Force on Election Integrity was convened by Secretary of State Sue Anne Gilroy and Governor Frank O'Bannon. The Task Force was charged with examining the election process in Indiana to ensure that elections were accurate, accessible and secure. After months of study, this bipartisan group reached consensus on several improvements to the election process; much of the work of the task force took the form of recommendations to the Indiana General Assembly. Many of these

recommendations were adopted, including provisional balloting, the establishment of a statewide voter registration system, and the phase out of punch card voting systems. Some of these initiatives were sidelined when appropriations were cut.

With the enactment of the Help America Vote Act of 2002 (HAVA) and the promise of federal funding to implement its requirements, Indiana's election reform efforts were revitalized. Secretary of State Todd Rokita convened the Vote Indiana Team in February 2003 to move forward with Indiana's election reforms. The Vote Indiana Team consists of 28 Hoosier voters representing a wide variety of ethnic, geographic and tri-partisan political backgrounds. Members met as a whole and in subgroups to address particular subject areas. At all times, meetings were open to the public and time was set aside for public comment. Furthermore, a 30-day public comment period began June 3, 2003, and ran through July 3, 2003, in accordance with HAVA requirements. The State Plan, all meeting notes, and other Team information can be found at www.sos.IN.gov, under "Vote Indiana Team Information." Please see Section 13 (page 52) of the State Plan to review simple procedures used for registering public comment.

HAVA requires the submission of a state plan detailing how HAVA requirements will be met and how HAVA monies will be utilized. This Executive Summary outlines the major initiatives of the Team and the plan for distributing the associated funding.

Voting Systems

A new Quantity Purchase Agreement (QPA) will be issued. All Indiana certified voting system vendors will be eligible to enter into the QPA. HAVA requires each county to acquire one voting system with accessible equipment per polling place. Punch card and lever machines will be replaced. Funding will be distributed as a reimbursement to counties for the costs incurred in purchasing a voting system. Eligibility for reimbursement will be determined after review of an application to the Indiana Election Division, certification of polling place accessibility, and cooperation with a local advisory council to choose accessible polling places. The current funding formula described in the Plan is based on estimates of funding outlined in HAVA. The formula could change as the result of actual funding appropriated by Congress over the next several years. Please refer to Sections 1 (A) and 6 (A) of the State Plan for further information.

Statewide Voter Registration System

A consultant and statewide steering committee will assist the Secretary of State and Indiana Election Division in the development and implementation of a statewide voter registration system. A Request For Proposal (RFP) will be issued for the selection of a vendor to create the system. The steering committee will help guide the creation and implementation of the system. The committee will be comprised of Team members and representatives from the clerks' and voter registration officials' associations. The system will also interact with computer systems of the Bureau of Motor Vehicles, Indiana State Department of Health and Department of Correction. Please refer to Sections 1 (B), Section 6 (B), and Section 8 (1) of the State Plan for further information.

Training and Education

Training will be geared toward election officials and pollworkers. Voter educational opportunities will also be created. Please see Section 1 (F), Section 3, Section 6 (C), Section 8 (2 a,b,c), and Section 10 of the State Plan for further information.

Statewide Grievance Procedure

A statewide grievance procedure will be established to handle complaints that may involve voting system and polling place accessibility, allegations of fraud, and other voting or registration processes. Please see Section 1 (E), Section 6 (E), Section 8 (3), and Section 9 of the State Plan for further information.

Provisional Balloting

Provisional balloting will be available as a safety net for the voter who may have erroneously been removed from the voter list and to guard against fraudulent voting practices. A free access system will be available for a provisional voter to check the status of the provisional ballot (e.g. find out whether the ballot was counted). Please see Section 1 (D), Section 6 (D), and Section 8 (4) of the State Plan for further information.

Accessibility

A comprehensive polling place accessibility study will be undertaken to guide local jurisdictions in making improvements. The

Secretary of State will apply for funding to help counties improve the accessibility of particular polling places. A voter will be able to cast a ballot privately and independently. Please see Section 4, Section 6 (HHS grants and F), Section 8 (5), and Section 10 of the State Plan for further information.

In summary, the efforts of the Vote Indiana Team and the dedication of Indiana's election officials will produce positive changes and set the course for Indiana's election reform efforts for years to come.

Indiana State Plan Introduction

What is HAVA?

In 2002 Congress passed the Help America Vote of 2002 which President George W. Bush signed into law on October 29, 2002. The Help America Vote Act embraces the goals of election reform by expecting all levels of government to provide a democratic process that does the following:

- maintains an accurate list of citizens who are qualified to vote;
- encourages every eligible voter to participate effectively;
- uses equipment that reliably clarifies and registers the voter's choice;
- conducts elections in a foreseeable and fair way;
- operates with equal effectiveness for every citizen and every community; and
- reflects limited but responsible federal participation.

What are the State's responsibilities under HAVA and purpose of a state plan?

States who want to receive HAVA requirements funding must submit a self certified state plan outlining specific provisions set forth in the following section. The Secretary of State as Indiana's chief election official shall develop the plan through a committee (Vote Indiana Team) consisting of chief election officials from Indiana's two most populous counties, other local election officials, key stakeholders (including members of the community with disabilities), and other citizens. The preliminary state plan must be available for public inspection and comment for thirty (30) days before submission to the Election Assistance Commission. The Vote Indiana Team shall take into account the public comments before submitting the final plan. The Vote Indiana Team met July 18, 2003 to take into account public comment received to date and to recommend the final plan for submission.

How is this document organized?

The State Plan's overview is contained in the Executive Summary. The Executive Summary briefly describes major initiatives contained in the State Plan and refers to the appropriate section in the plan document for further information. HAVA requires the state plan to address the thirteen (13) provisions listed below. A Glossary of Terms and Acronyms is included to define or reference frequently used terminology or acronyms. Appendix 1, Indiana Election Reform History, describes Indiana's election reform efforts beginning prior to statehood through today. Appendix 2 explains the Hoosier Equipment Lease Purchase (HELP) Program. A Table of Contents is also attached to guide the reader through this document.

- How Indiana will use these federal funds to comply with HAVA's requirements concerning voting systems, the statewide voter registration system, and provisional voting.
- How Indiana will distribute (and monitor the distribution of) federal finds to local governments and other fund recipients, including the criteria to determine eligibility and to monitor performance.
- How Indiana will provide voter education, election official, and poll worker training programs.
- How Indiana will adopt voting system standards consistent with HAVA.
- How Indiana will establish a fund for administering these federal payments and how the Indiana fund will be managed.
- Indiana's proposed budget to carry out the activities required to receive these federal funds.
- How Indiana, in using these federal funds, will maintain a level of state expenditures at least equal to Indiana's expenditures for these activities during the July 1, 1999 – June 30, 2000 fiscal year.
- How Indiana will adopt performance measures to determine the success of state and local government in carrying out the plan, including timetables, a description of the criteria to measure performance, and which official is responsible for meeting the requirements.
- A description of the required "uniform nondiscriminatory State grievance procedure" for HAVA-related complaints.
- If Indiana received additional federal money from another source, how this money will be used to carry out activities under the State Plan.
- How Indiana will conduct ongoing management of the HAVA State Plan.

- How the State Plan reflects changes from the State Plan for previous fiscal years.
- A description of the State Plan Committee and the procedures used by the Committee to develop the Plan.

How did we receive Public Comment?

Section 13 of the State Plan describes in detail the make up of the Vote Indiana Team and its work to date. Further information about the work of the Team may be found at www.sos.IN.gov. Public comment was submitted to the chair of the Vote Indiana Team in writing to the following address: Todd Rokita, Indiana Secretary of State, 200 West Washington Street, Room 201, Indianapolis, Indiana 46204, and was emailed to VoteIndianaTeam@sos.state.in.us. Public comment on the preliminary state plan was also left at 317-234-VOTE or at the Indiana Election Division toll free in Indiana at 800-622-4941(TDD). Comments were also faxed to 317-233-3283. The Team also received public comment at the annual Clerks' Conference and the Indiana Voter Registration Association meeting.

This Plan is available in accessible formats upon request. Please call 234-VOTE or email havaadministrator@sos.state.in.us for further information.

GLOSSARY OF TERMS AND ACRONYMS

"Certification of accessibility of polling place" Part of the application process by a county to receive state money to reimburse the county for purchasing voting equipment. The certification will state that the polling places selected by the county permit voters with disabilities to cast their ballots in the polling place with the same access and privacy provided to other voters.

"Free access system" A toll-free telephone number, an Internet web site, or other method that permits a voter who casts a provisional ballot to learn whether or not the voter's ballot was counted, and if not, the reasons why the provisional ballot was not counted.

"HAVA" The Help America Vote Act of 2002 (Public Law 107-252). A federal law passed by Congress and signed by President Bush on October 29, 2002. Each state will be passing its own laws as needed to implement HAVA in that state.

"Maintenance of Effort" A requirement under the HAVA law that when a state uses "Title III requirement monies," the state pledges to keep spending in the future the same amount of money that the state had spent during 1999 and 2000 for the programs for which the state is using the "Title III requirement monies."

"National Voter Registration Act of 1993" A federal law which enacts requirements concerning voter registration for federal elections.

"Poll worker" Paid position at polling place on Election Day to assist in operating the election.

"Provisional Ballot" A ballot cast by an individual when it is not clear whether the individual is entitled to vote in a precinct. The provisional ballot is kept separate from the other ballots cast by voters in the precinct. After election day, the county election board decides whether the individual is entitled to vote and whether the individual's provisional ballot should be counted or rejected.

"Provisional Ballot Status" The decision made by the county election board whether to count a provisional ballot, and if not, the reasons for rejecting the ballot.

"Purchase" When discussed in the context of voting system, includes lease and lease-purchase agreements, as specified by Indiana Code 3-11-6.5."

"Off election year" The year in each four year election cycle in Indiana in which no regularly scheduled elections are held at either the state or local level. The off-election year occurred in 1997 and 2001 and will occur in 2005.

"Qualifying precinct" Defined in HAVA as a precinct where a punch card or lever machine voting system was used in the November 2000 election.

"Section 101 monies" Money made available from the federal government to state governments under HAVA to improve the manner in which elections are administered in the state.

"Section 102 monies" Money made available from the federal government to state governments under HAVA specifically to replace lever voting machines or punch card voting systems with newer types of voting systems. This money can also be used to reimburse local governments who have already purchased replacement voting systems since November 2000.

"Title III requirement monies" Money made available from the federal government to state governments under HAVA to help state and local governments comply with some of the requirements imposed under the HAVA law. These requirements include a statewide voter registration system, making voting equipment upgrades, and voting by provisional ballot.

"The Team" (Vote Indiana Team) The committee established under HAVA to develop the State Plan.

"Video streaming" Video available on the internet.

Acronyms

"ADA" – Americans with Disabilities Act

"BMV" – Bureau of Motor Vehicles

"CLE" – continuing legal education

"DOC" – Department of Correction

"DRE" – direct recording electronic voting system

"IDOA" – Indiana Department of Administration

"IED" – Indiana Election Division

"IVRA" – Indiana Voter Registration Association

"GPCPD" – Governor's Planning Council for People with Disabilities

"HHS" – Health and Human Services

"NCAS" – cross between a Public Service Announcement and a paid advertisement

"QPA" – Quantity Purchase Agreement

"RFP" – Request for Proposal

"SVF" – Statewide Voter Registration System

"VIT" – Vote Indiana Team

Indiana State Plan

This Plan is available in accessible formats upon request. Please call 234-VOTE or email havaadministrator@sos.state.in.us for further information.

Section 1

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(1) How the state will use the requirements payment to meet the requirements of Title III, and, if applicable under section 251 (a)(2), to carry out other activities to improve the administration of elections.

Congress passed the Help America Vote Act of 2002 (HAVA) to provide election reform across the nation and bring uniformity to state elections. Title III of HAVA requires Indiana to do the following:

- Provide accessible machines in every polling place.
- Adopt uniform and nondiscriminatory standards that define what constitutes a vote.
- Provide voting systems that meet enhanced standards, including allowing the voter to verify the vote before the ballot is cast, permitting the voter to change or correct the ballot before it is cast, and notifying a voter of an overvote or establishing a voter education program specific to that voting system that notifies voters of the effects of overvoting.
- Allow individuals to cast provisional ballots and provide a free access system to inform a provisional voter whether the vote was counted, and if not counted, the reason why.
- Implement in a uniform and nondiscriminatory manner a single, interactive, computerized statewide voter registration system that contains the name and registration information of every legally registered voter in the State and assigns a unique identifier to each.
- Require certain first time "mail in" registrants to provide identification.
- Implement a uniform and nondiscriminatory HAVA grievance procedure.

Prior to the passage of HAVA, Indiana had already laid the groundwork for election reform in the state. Public Law 209-2003 (SEA 268), Public Law 116-2003 (SEA 477) and Public Law 224-2003 (HEA 1001) provide for the implementation of HAVA in Indiana. With the state's initial framework and the passage of recent legislation, Indiana is on track to comply with all of the provisions of HAVA.

One example of Indiana's work to lead the nation in election reform is the Indiana Voter's Bill of Rights. Working from language prepared by the Secretary of State's Election Division, the Indiana Election Commission unanimously approved the text of the Voter's Bill of Rights in March 2003. It is a plain language document about accessibility and accountability; accessibility for legally registered voters and accountability for those who would act to defraud election administrators and in turn other voters. Posters of the Voter's Bill of Rights were printed in both English and Spanish. The Secretary of State's office provided Voter's Bill of Rights posters to every county for display in polling places on Primary Election Day, May 6, 2003 and intends to keep the Voter's Bill of Rights as a permanent fixture in Indiana polling places and posted to the Secretary of State's website www.sos.IN.gov.

Currently, it is estimated that Indiana will receive $40.4 million in Title III funds (Budget estimates set forth in section 6), and the Secretary of State and the Indiana Election Division intend to use the requirements funding for the following endeavors:

A. Voting Systems

History of Voting Systems Upgrade Programs before HAVA

In 2001, the Indiana General Assembly enacted legislation to provide for the gradual elimination of punch card voting systems over several years. The legislature also appropriated $4 million dollars to fund the replacement of the punch card systems.

However, this 2001 Indiana legislation had some significant limits:

First, this state money was never available to reimburse counties who had purchased voting systems between January 1, 1998 and July 1, 2001. Instead, state law specified that only money received from the federal government could be used for this purpose.

Second, the $4 million in state money was not appropriated to the new "voting system improvement fund". Instead, this appropriation was made from the Build Indiana Fund. The effect of this distinction became clear in 2002, when the state through an executive order diverted all Build Indiana Fund monies to deal with the state's growing budget deficit.

As of mid-2002, there was no state or federal money available for counties to receive any reimbursement at all for their voting system purchases. Then, in October 2002, the Help America Vote Act was finally passed and sent to the President.

HAVA, and the Indiana legislation enacted in 2003 to implement it, expanded the scope of the voting system upgrades required in Indiana: both lever and punch card must be phased out by December 31, 2005; all counties must also acquire voting systems to enable blind voters and voters with other disabilities to vote without assistance in each polling place.

HAVA (and the 2003 federal budget bill) also provide for limited voting system reimbursement to be passed on to counties. Under these federal laws, a total of more than $9 million will be available to reimburse Indiana counties for voting system upgrades if these counties were using lever or punch card systems at the November 2000 election.

In addition, once the State Plan becomes final, Indiana will qualify to receive an estimated $30 million in additional federal funds

over the next two federal fiscal years that can be used to assist with county voting system reimbursements.

In Indiana, even before HAVA passed, the Election Division acted to encourage all counties to submit applications for voting system reimbursement under the 2001 Indiana law. The Election Division advised clerks that while Congress and the state legislature were considering new laws that could change the amount and eligibility requirements for reimbursement, the county should act now to indicate its interest and to protect its eligibility. Some 72 of 92 counties followed that advice, and filed applications by the January 2003 deadline under state law.

In its 2003 session, the General Assembly passed a comprehensive bill to begin implementing HAVA in Indiana (Senate Enrolled Act 268). This new legislation actually gave an option to expand the availability of voting system reimbursement to counties that purchased a new voting system or upgrade between January 1998 and July 2001. However, Indiana law is still subject to the limits placed on its use of the federal money by HAVA.

In 2002, Indiana issued a Quantity Purchase Agreement (QPA) with four voting systems vendors whose optical scan or direct record electronic (DRE) voting systems were previously certified by the Indiana Election Commission. Replacement of punch card and lever machines used in November 2000 by more than half of Indiana's voters (in a total of 2983 precincts) is already under way. To help reduce the costs of any particular system, the Indiana Department of Administration (IDOA) will issue another QPA to facilitate the replacement of the remaining punch card and lever machines and the implementation of one accessible DRE per polling place. All certified voting system vendors will be eligible to enter into the QPA with IDOA. The Team recommends each QPA contain provisions permitting volume discounts for voting system purchases and multi-county purchasing arrangements through intergovernmental agreements or other methods permitted by state law. The team also recommends that the two following specifications be added to the QPA: (1) A vendor can only enter into the QPA if the vendor agrees not to charge a county interest during the period in which the county is waiting for reimbursement from the state, and (2) the vendor shall share the system's training video with the state. The team urges that the procurement process for voting systems adhere to minority business enterprises and women owned business enterprises requirements.

No later than January 1, 2006, assuming a waiver is granted, (Under HAVA, each state shall replace all punch card voting systems or lever voting systems by January 1, 2004 unless a waiver is granted and the State ensures that all punch card voting systems and lever voting systems will be replaced in time for the first election for Federal office held after January 1, 2006. Public Law 209-2003 prohibits the use of lever machines and punch card systems in Indiana elections after December 31, 2005. Like most states, Indiana will seek a waiver see section 6, page 25.) all punch card and lever voting systems will be replaced.

Under the system set up by P.L. 209-2003, funds would be released in the following manner: each county seeking reimbursement applies to the Indiana Election Division, an agency of the executive branch. The Secretary of State and Indiana Election Division personnel review the applications and certifications regarding polling place accessibility. The Secretary of State and Indiana Election Division recommend disbursement of funds to the Budget Committee, a bipartisan body consisting of state legislators and the state budget director. The Budget Committee is statutorily required to review these recommendations. Disbursements will be made to the counties on the approval of the State Budget Agency, an executive branch agency, after review by the Budget Committee and subject to fund availability.

The elimination of punch card and lever machines, along with the implementation of accessible machines, will require the use of Sections 101, 102, Title III, and state matching funds.

B. Statewide Voter Registration System

No later than January 1, 2006, assuming a waiver is granted, (under HAVA, each state shall be required to comply with the statewide voter file requirement by January 1, 2004 unless a State certifies to the Commission that the State will not meet the deadline for good cause; the HAVA reference then becomes January 1, 2006. Like most states, Indiana will seek a waiver see section 6, page 36.) the Indiana statewide voter registration system will be online in all 92 Indiana counties; this will allow the creation and maintenance of a more accurate list of persons legally authorized to vote in Indiana. In addition to using the system for voter registration, Indiana plans to use this single, centrally administered system to assist the Secretary of State in providing all Indiana voters access to a free web-based or phone-based information system that indicates where a voter's polling place is located and confirms a voter's registration record.

A consultant and steering committee, consisting of members of the Team and representatives from the clerks' and voter registration officials' association, will assist in the implementation of the statewide voter registration system. An RFP will be issued for the

consultant and the vendor. The team urges that the procurement process for the consultant and the statewide voting registration system adhere to minority business enterprises and women owned business enterprises requirements.

The continuous maintenance of the statewide voter registration system will require a well coordinated interaction between county officials and state officials. Each county voter registration office, the Indiana Election Division, and the Secretary of State will have immediate electronic access to the information contained in the computerized list. The county voter registration office may change only data related to the voters registered in that respective county. Furthermore, the county voter registration office must electronically enter all voter registration information obtained by the county voter registration office into the computerized list on an expedited basis. The county voter registration office shall perform list maintenance with respect to the computerized list on a regular basis. The Indiana Election Division shall coordinate the computerized list with the Indiana Department of Correction records so the county voter registration office can cancel the registration records of disfranchised individuals on an expedited basis. The Indiana Election Division shall also coordinate the computerized list with the Indiana State Department of Health so the county voter registration office can cancel the registration records of deceased individuals on an expedited basis.

The Secretary of State, the Co-Directors of the Indiana Election Division, and the Bureau of Motor Vehicles Commission shall enter into an agreement to match information in the computerized list database with information in the database of the Bureau of Motor Vehicles Commission to enable the Indiana Election Division and the commission to verify the accuracy of the information provided on voter registration applications. This link will also serve as the access point for the Indiana Election Division to obtain and verify certain information from the Social Security Administration in accordance with HAVA. Indiana statute defines a unique identifier which will be assigned to each individual by the Indiana Election Division; this will assist in maintaining the accuracy of the statewide voter registration system.

C. First-time Mail-in Registrant Requirements

HAVA requires certain first-time mail-in registrants to provide identification. The type of identification that shall be provided includes the following: (1) a current and valid photo identification, or (2) a current utility bill, bank statement, government check, paycheck, or government document that shows the name and address of the voter.

Exceptions: Voters exempt from these requirements include those entitled to vote by absentee ballot or other than in person under the Uniformed and Overseas Citizens Absentee Voting Act and the Voting Accessibility for the Elderly and Handicapped Act.

County voter registration offices are required by Public Law 209-2003 to identify the first-time mail-in registrants required to provide this additional documentation, and to mail a notice to these voters no later than March 1, 2004 requesting a copy of these documents. As a result, the county voter registration offices hope to secure the required documentation from as many of these voters as possible before the May 2004 primary.

D. Provisional Balloting

A free access system will be established upon the completion of the statewide voter registration system to provide a voter information as to whether a provisional ballot was counted; if the ballot was not counted, information as to the reason will be available. In the meantime, county election boards will make this information available to any voter upon inquiry by the voter. The county election boards shall maintain reasonable procedures to protect the security, confidentiality and personal information relating to a provisional voter.

E. Statewide Grievance Procedure

Indiana recently passed legislation to establish a statewide grievance procedure to comply with the HAVA requirement that a state based administrative complaint procedure be in place. Title III funds will be used to establish this process which is explained in detail in section 9 (page 49) of this plan.

F. Training and Education

The Secretary of State, through the Indiana Election Division, intends to expand upon the current training and educational opportunities for poll workers and voters, which are explained in detail in Section 3 (page 17) of this plan.

An election official and poll worker certification process will be developed and administered by the IED of the Secretary of State's office to more effectively train local election officials and poll workers; special focus will be on HAVA's requirements of accessible

voting systems and polling places, provisional ballots and documentation for first-time mail-in registrants.

Section 2

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(2) How the State will distribute and monitor the distribution of the requirements payment to units of local government or other entities in the State for carrying out the activities described in paragraph (1), including a description of –

(a) The criteria to be used to determine the eligibility of such units or entities for receiving the payment; and

(b) The methods to be used by the State to monitor the performance of the units or entities to whom the payment is distributed, consistent with the performance goals and measure adopted under paragraph (8)

The performance measures outlined in Section 8 (page 41) of this document will be used to gauge participation and effectiveness of distributions. Performance measures will be monitored semi-annually by the Indiana Election Division upon the completion and submission of election reports by the county as required by the law. The Indiana Election Division will provide a report to each Vote Indiana Team member summarizing progress under the performance measures.

A. Voting Systems

The Indiana Department of Administration will issue a new Quantity Purchase Agreement (QPA) for voting system purchases in order to provide counties with the greatest number of options for voting system purchases and greatest amount of information to use in evaluating voting systems. HAVA funds will be placed in the Election Administration Assistance Fund. Funds will be distributed based on availability and by the priorities set by the Vote Indiana Team and any pertinent statutory requirements. All distributions are subject to federal and state audit standards.

Under the system set up by P.L. 209-2003, funds would be released in the following manner: each county seeking reimbursement applies to the Indiana Election Division, an agency of the executive branch. The Secretary of State and Indiana Election Division personnel review the applications and certifications regarding polling place accessibility. The Secretary of State and Indiana Election Division recommend disbursement of funds to the Budget Committee, a bipartisan body consisting of state legislators and the state budget director. The Budget Committee is statutorily required to review these recommendations. Disbursements will be made to the counties on the approval of the State Budget Agency, an executive branch agency, after review by the Budget Committee and subject to fund availability.

Under a memorandum of understanding or grant provision, failure to comply with any portion of Title III may result in the county being liable for all previously disbursed funds to that county from the state fund.

B. Statewide Voter Registration System

The development, conversion, and ongoing maintenance of each county's data in the statewide voter registration system will be defined in a memorandum of understanding. Data will be collected through specialized reports containing information developed by the Indiana Election Division to ensure the county's participation in the overall success of the statewide voter registration system. The continuous maintenance of the statewide voter registration system will require a well coordinated interaction between county officials and state officials.

Section 3

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(3) How the state will provide programs for voter education, election official education and training, and poll worker training which will assist the State in meeting the requirements of Title III.

The Indiana Election Division will provide traditional and alternative training tools to local election officials for topics such as poll worker training and voter training regarding voting equipment. The Indiana Election Division will enlist active input from and work with disability advocacy groups in designing poll worker training. The Indiana Election Division will provide continuing education annually for local county election boards, clerks of the circuit court, and voter registration officials; sessions will include information about HAVA's requirements.

Frequently scheduled and regionally located training sites will be used for local registration officials so they will be able to use the statewide voter registration system to its fullest potential. The system will also contain an online help query.

The training efforts proposed by this plan are designed to meet three goals.

1. There will be various methods of training available in order to effectively train poll workers so they are aware of voters' rights, sensitive to voters' needs, and proficient in their jobs; special emphasis will be placed on provisional ballots, voters with disabilities and voter identification needs. This training will include the following:

- video streaming of poll worker training (internet access to training videos)
- agreements with local government television stations to air poll worker training
- a master video on poll worker training for use by county election officials
- training for provisional ballot counters
- written materials and web information on Voter's Bill of Rights, provisional ballots and overvoting
- a "teach the teacher" certification program for individuals who provide instruction on voting machine usage
- products that include interaction with voters with disabilities (physical, sensory and cognitive impairments)

2. There will be on going training of full service voter registration agency employees and county election administrators so each understands the needs of voters with disabilities, voters who do not speak English, media, political party officials and campaign workers. This training will include the following:

- production of written materials and online information
- coordination with local advocacy groups to develop and target delivery of materials
- development of videos (and internet access to these videos)
- production of a video for county commissioners and others charged with selecting polling places

3. There will be efforts to increase voter participation by providing information about the voting process to better educate voters. Included will be information about voting systems, voter rights, accessibility and military/overseas voting. This will include the following:

- development of agreements with local government and public television stations to air voter instructions on use of voting equipment and information about voter rights
- production of a master video on voter education
- arrangement for display of voting equipment in malls and local library systems
- Development/Production of Public Service Announcements and NCAS
- Production of written materials and web information on Voter's Bill of Rights, provisional ballots and overvoting
- Publication of Military/Overseas voter guide with a focus on absentee balloting process including additional information on military/overseas voting on Indiana Election Division website

In the spirit of fully informing local government officials who must carry out activities required under HAVA, the Team fully supports the idea of conducting HAVA workshops targeted to Indiana's local government officials. It is expected that these opportunities may occur during the annual meetings of the Association of Indiana Counties and Indiana Association of Cities and Towns.

The proposed budget set forth in section 6, sets aside $3.9 million to pay for voter education, election official education and training, and poll worker training. The plan calls for $1.4 million of the $3.9 million to be set aside for voter education. The Secretary of State and Indiana Election Division will prepare a training and voter education budget to provide the Vote Indiana Team. However, the Team recognizes that significant training and voter education efforts must occur to prepare for the 2004 election and must proceed before the completion of a final budget under this section.

Section 4

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(4) How the state will adopt voting system guidelines and processes which are consistent with the requirements of Title III.

Indiana Code 3-11-15-13.3 sets forth voting systems guidelines and processes consistent with the Voting Systems Standards set forth in HAVA. A voting system certification expires five years after the date of approval of the system by the Commission.

- Under Indiana law, the Indiana Election Commission must approve any model of voting system before it may be used in an election. Indiana law now requires that a voting system shall meet the Voting Standards adopted by the Federal Election

Commission on April 30, 2002 in order to be approved by the Commission for use in Indiana.

- Under Indiana law, the Commission may not approve a voting system for use in Indiana unless the system meets the specifications in the Indiana Code. The specifications include ensuring secrecy and, in the case of a direct recording electronic voting system, preventing a voter from voting for the same candidate or for or against the same public question more than once. In cases where an optical scan ballot card system is used with a precinct tabulator, voters are alerted by the system to any overvote and provided with an opportunity to correct any overvote error. Where paper ballots or optical scan ballot card voting systems without precinct tabulators are used or absentee ballots are mailed out, Indiana law now requires a voter education program to inform voters using these systems of the effect of overvoting.
- Current Indiana law establishes uniform and nondiscriminatory standards to define what constitutes a vote on a paper ballot, optical scan voting system and electronic voting system. As referenced in the landmark United States Supreme Court decision in *Bush v. Gore*, 531 U.S. 98 (2000), Indiana statutes set forth very specific standards for determining what constitutes a vote in each type of voting system that may be used.
- The Indiana Code and election manuals produced by the Indiana Election Division are both very specific on how to accurately count each vote.

New Indiana law also requires that voting systems be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters. A county satisfies these requirements if the election board provides at least one electronic voting system or other voting system equipped for individuals with disabilities at each polling place. Indiana also passed legislation in 2003 which requires that each voting system (1) produce a permanent paper record with a manual audit capacity for the system and (2) provide the voter with an opportunity to change the ballot or correct any error before the permanent paper record is produced. The paper record produced must be made available as an official record for a recount or contest conducted with respect to any election in which the voting system was used.

The Team recommends the creation of a committee comprised of voters with disabilities to assist in the certification process of voting systems and to evaluate voting systems' accessibility.

Section 5

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(5) How the state will establish a fund described in subsection (b) for purposes of administering the State's activities under this part, including information on fund management.

The Indiana Voting Systems Improvements Fund, established by legislation in 2001, has been renamed the Election Administration Assistance Fund (hereinafter "the fund") under Public Law 209-2003.

The fund consists of all money allocated to the state by the federal government

(1) under Section 101 of HAVA (improvements to election administration generally),
(2) under Section 102 of HAVA (funds used exclusively for replacement of punch card and lever machines),
(3) under Title II, Subtitle D, Part I of HAVA (funds to meet Title III requirements including funds to bring all voting systems into compliance with HAVA accessibility requirements, statewide voter registration list, (4) provisional balloting, grievance procedure and administration, etc.), and
(4) under any other program for the improvement of election administration.

The fund will also contain money appropriated to the fund by the Indiana General Assembly.

Within the fund, a total of five accounts have been established: an account has been established for each of the first three sources of allocations described above, and two accounts have been established within the fund for state matching funds allocated towards voting system reimbursements and the statewide voter registration system. There are restrictions, based on HAVA requirements, placed on distribution of money from each account.

Under the system set up by P.L. 209-2003, funds would be released in the following manner: each county seeking reimbursement applies to the Indiana Election Division, an agency of the executive branch. The Secretary of State and Indiana Election Division personnel review the applications and certifications regarding polling place accessibility. The Secretary of State and Indiana Election Division recommend disbursement of funds to the Budget Committee, a bipartisan body consisting of state legislators and the state

budget director. The Budget Committee is statutorily required to review these recommendations. Disbursements will be made to the counties on the approval of the State Budget Agency, an executive branch agency, after review by the Budget Committee and subject to fund availability.

Indiana's Budget Committee is a unique entity. The State Budget Committee has five members, with four alternate members who each may have voting privileges in the absence of a member. This liaison committee is comprised of the state budget director, two members of the Senate, one Republican and one Democrat, and two members of the House of Representatives, one Republican and one Democrat. The Committee continues to meet even when the General Assembly is not in session.

Section 6

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(6) The state's proposed budget for activities under this part, based on the State's best estimates of the costs of such activities and the amount of funds to be made available, including specific information on-

(a) the costs of the activities required to be carried out to meet the requirements of Title III;

(b) The portion of the requirements payment which will be used to carry out activities to meet such requirements; and

(c) The portion of the requirements payment which will be used to carry out other activities.

Budget:

At the time this plan was drafted, federal appropriations for HAVA were less than the amounts authorized by the legislation. The following table outlines the assumptions regarding federal funding that the State used in creating its budget for HAVA activities. These numbers reflect the following: (1) $15,752,875 in early payments received by Indiana as of June 17, 2003 (consisting of $9,522,394 in Section 102 payments and $6,230,481 in Section 101 payments); and (2) estimates from the Federal Funds Information for States Issue Brief, March 5, 2003.

The total appropriation for Indiana will not be known until Congress passes the FY 05 budget. Unless full funding is received, Indiana may not be able to initiate HAVA mandates described in this State Plan in the time prescribed. Indiana legislation was passed to allow for the required state match (Public Law 224-2003, SECTION 98).

Federal Fiscal Year	Total Federal funds	Indiana federal funds	5% match
Early Payments	$325,000,000 (Sec. 101) $325,000,000 (Sec. 102) (appropriated)	$15.8 million	N/A
FY 2003	$810,000,000 (appropriated)	$17.3 million	$865,000
FY 2004	$500,000,000 (President's budget) ($1 billion authorized)	$10.5 million	$525,000
FY 2005	$600,000,000 (authorized)	$12.6 million	$630,000
Total	**$2,560,000,000**	**$56.2 million**	**$2,020,000**

Additional Funding: Health and Human Services grant

HAVA also authorizes the United States Secretary of Health and Human Services (HHS) to administer a grant program to do the following: (1) make polling places, including the path of travel, entrances, exits, and voting areas of each polling place more accessible to individuals with disabilities, including the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence as other voters); and (2) provide individuals with disabilities and other individuals described in (1) with information about the accessibility of polling places, including outreach programs to inform the individuals about the availability of accessible polling places and training election officials, poll workers, and election volunteers on how best to promote the access and participation of individuals with disabilities in elections.

The federal omnibus budget bill of 2003 and Indiana's Public Law 209-2003 authorize the state (through the Secretary of State, with the consent of the Indiana Election Division Co-Directors) to apply for grant funds. The funds are to be distributed based on each state's voting age population as a percentage of the national voting age population. HHS estimates that Indiana's share of these funds for 2003 will be $251,048.

On July 7, 2003, the Secretary of State applied for these grant funds to be used in accordance with the requirements set forth in the HHS *Federal Register* notice of May 21, 2003, as amended and corrected May 29, 2003. To provide individuals with disabilities

with information regarding the accessibility of polling places, the Secretary of State's office plans to conduct a statewide survey utilizing people with disabilities as the survey takers. The Governor's Planning Council for People with Disabilities (GPCPD) will coordinate the survey project and will tabulate the results and provide the information to the counties. GPCPD will also assist local election officials with the formation of local advisory councils consisting of elderly voters, voters with disabilities, and local election officials. The local councils will review the accessibility survey results and make recommendations to the county executive about making accessibility accommodations and/or moving polling places to accessible locations.

The Secretary of State and Indiana Election Division will prepare a budget for use of grant funds received from HHS. The Team estimates up to $60,000 will be necessary to conduct the survey described above.

In 2003, Indiana passed the following standards for polling place accessibility under Public Law 116-2003:

"For purposes of this chapter, a facility is an accessible facility for elderly voters and voters with disabilities only if the following apply:

(1) The facility meets the standards for accessibility for elderly voters and voters with disabilities established under 42 U.S.C. 1973ee-1 through 42 U.S.C. 1973ee-6

(2) All the following are accessible to elderly voters and voters with disabilities in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters:

(A) Parking spaces marked and available to conform with IC 5-16-9

(B) The path to the facility that an individual must travel on the property where the facility is located

(C) The entrance of the facility to be used by voters

(D) The paths of travel within the facility to the rooms or areas where the voting system is located

(E) The rooms or areas in the facility where the voting systems are located."

Distribution of Indiana's HAVA funds (This chart is based on the $58.2 million budget.)

Total money: $58.2 million
12 to 19 % on Voter File which equals **$7-11 million** from Sec. 101, Title III requirements monies and state matching funds
6.7 % on Training and Education which equals **$3.9 million** from Sec. 101 and Title III requirement monies. $1.4 million will be taken from the Sec. 101 funds for Voter Education.
3.4 to 10.3% on Strategic Reserve (to meet any HAVA requirements) which equals **$2–6 million** (this range is based on the range for the voter file; if less than $11 million is used for the voter file, the remaining amount will be transferred to the Strategic Reserve) from Section 101 and Title III requirement monies
.9% on Administration of Grievance Procedure which equals **$500,000** from Title III requirement monies
.9% on Administration of HAVA which equals **$500,000** from Sec. 101 funds •This will include administrative costs associated with the development and oversight of Title III programs and other administrative costs.
69% on Voting Equipment which equals **$40.1 million** from Sec. 101, 102, Title III requirement monies and state matching funds •Tier A = precincts (2983) that used punch card or lever in 2000 •Tier B = all other remaining precincts (2619)

Account	Amount	Distribution	
Section 101	$6,230,481 (received)	Training & Education $1,730,481 Administration $500,000 Voting Equipment $2,000,000 Strategic Reserve $2,000,000	Not Allocated $ 0
Section 102	$9,522,394 (received)	Voting Equipment $9,522,394	Not Allocated $0
Title III Requirement Monies	$40,400,000 (estimated)	Voting Equipment $26,730,481 Voter File $10,900,000 Grievance $500,000 Training and Education 2,169,519	Not Allocated $100,000
State Match	$2,020,000 (estimated)	Voting Equipment $1,886,408 Statewide Voter File $100,000	Not Allocated $33,592
Total	**$58,172,875**	**$58,039,283**	**Not Allocated $133,592**

A. Voting Systems

It will be necessary to use Section 101, Section 102, Title III and state matching fund monies for voting systems reimbursements. Indiana had more than half of its voters using punch card or lever machines in November 2000.

Waiver Recommendation for Punch Card and Lever Voting Systems

The Team recommends that the Secretary of State and the Co-Directors of the Election Division certify in accordance with HAVA and Public Law 209-2003 that good cause exists to extend the deadline for replacement of lever voting machines and punch card voting systems until December 31, 2005. The grave risk of voter confusion, the lack of sufficient time for poll worker training, and the inefficient use of limited federal funds that would result from hasty acquisition of replacement voting system to comply with the January 1, 2004 deadline, makes this extension not only desirable, but essential.

Voting System Certification

The Team recommends that the Indiana General Assembly enact legislation in its 2004 session to address the issue of voting system certification. Under current Indiana law, a voting system is certified for marketing and use in Indiana elections for a term of five years after the Indiana Election Commission determines that the voting system complies with the Indiana law in effect at the time of certification. Indiana law formerly incorporated the 1990 Federal Election Commission (FEC) standards, and now incorporates the revised 2002 FEC standards.

Former Indiana law also provided that existing punch card voting system certifications would expire in July 2003 if the Indiana Election Commission determined that the voting system improvement fund established under 2001 law had a balance of at least $5 million dollars. However, as noted earlier in this Plan, no monies were allocated by the state to this fund at any time before the fund ceased to exist in May 2003.

Although Public Law 209-2003 provides that lever voting machines and punch card voting systems may continue to be used in Indiana elections until December 31, 2005, the existing certifications for these systems should be revoked before that date so that no additional marketing of the systems can occur. To provide for more detailed scrutiny of applications for voting system certification, the General Assembly may wish to consider providing an up-to-four year term for certification, with all existing

applications coming up for renewal during the off election year.

Tier Structure for Voting System Reimbursement

Counties will be divided according to the following levels and definitions:

- # Tier A = Qualifying Precincts under HAVA (precincts that used punch card or lever machines in the 2000 general election)
- # Tier B = all remaining Indiana precincts

The state will set aside $40.1 million to reimburse counties in the following manner:

- # All counties will be eligible for reimbursement for up to $50,000 for voting system software to operate the voting systems within the county. This reimbursement will be available in any fiscal year.
- # Tier A will be reimbursed up to $8,000 per precinct.
- # Tier B will be reimbursed up to $4,000 per precinct.
- # Tier A will be reimbursed on a first come, first served basis of federal FY 03 funds.
- # Remaining precincts (those in Tier A who have not been reimbursed and Tier B) will be reimbursed on a first come, first served basis of federal FY 2004 and 2005 funds.

The Team recognizes that this Plan proposes a reimbursement level for Tier A counties (up to $8,000) that exceeds HAVA's reimbursement amount for qualifying precincts using Section 102 monies ($3,192). It is the Team's intent to prioritize federal funding to alleviate as much as possible the possibility of an unfunded federal mandate while still being mindful of all of Indiana's reform obligations under HAVA.

Quantity Purchase Agreement (QPA)

The Election Division will work with the Indiana Department of Administration to enter into quantity purchase agreements with each vendor of a voting system currently certified for marketing and use in Indiana, with the expectation that the agreement will be entered into by the vendor and the state no later than September 1, 2003.

Lease or Lease-Purchase of Voting System

State law (Indiana Code 3-11-6.5-0.7) specifically provides that an agreement to lease or lease-purchase voting system permits a county to qualify for reimbursement. The Team recognizes that this may be a practical option for some counties to pursue due to the lack of suitable year-round climate-controlled storage space for voting systems.

Application Process for Voting System Reimbursement

The voting system reimbursement application process will be administered in accordance with the "first come, first served" process described in this subdivision.

Indiana Code 3-11-6.5-4, as amended by Public Law 209-2003, SECTION 123, states that "To receive reimbursement for the purchase of voting systems… a county must file an application with the election division…If a county filed an application under section 3 of this chapter (repealed) not later than January 31, 2003, the application may be amended to comply with this chapter or the county may file a new application…"

Indiana Code 3-11-6.5-6.1, as added by Public Law 209-2003, SECTION 124, states "When approving applications for reimbursement for voting systems… the budget agency shall give priority to approving applications to replace a punch card voting system or lever voting machine system." The Team understands this statute to require that priority be given to Tier A county applications before Tier B county applications.

"First come, first served" will be determined strictly on the basis of the date and time that an amended application, or first time application from a county, is filed with the Election Division.

Application for Section 102 funds

The Election Division will, by August 1, 2003, notify the circuit court clerks of counties with qualifying precincts which submitted an application for voting system reimbursement under Indiana Code 3-11-6.5 before January 31, 2003, that the county must file an

amended application with the Election Division no later than October 31, 2003 to receive the initial disbursement of Section 102 money under this Plan.

Unless the original application already contains this information, the amended application must:

(1) list the names of the precincts in the county which were qualifying precincts as of November 2000;

(2) list the physical location (and mailing address if available) of the polling places designated in November 2002 to serve the residents of that precinct;

(3) state that the county election board will cooperate with the polling place accessibility survey scheduled for May 2004, subject to any amendments required to state law to permit access to polling places by survey personnel;

(4) subject to the availability of Title III requirement monies to the county before October 1, 2004, certify that the county will make all permanent or temporary improvements to the polling place no later than October 1, 2004 to comply with the accessibility standards set forth in state law (Indiana Code 3-11-8), and to the extent possible, make any additional improvements identified in the May 2004 survey that are not specifically required by state or federal law;

(5) certify that, as of December 31, 2005, the polling place used for the precinct will contain at least one voting system to permit a voter who is blind or visually impaired to vote privately and independently in accordance with Public Law 209-2003;

(6) certify that no later than December 31, 2003, the county will adopt an ordinance to establish a local advisory council comprised of representatives of the disabilities community and elderly voters to provide assistance to the county in choosing accessible polling places;

(7) list the date the county entered into a contract for the purchase, lease, or lease-purchase of voting system. (An executed and attested copy of the contract or adequate evidence of a contract must be attached);

(8) state whether this purchase or lease was entered into under a state quantity purchase agreement with a vendor certified to market voting systems in Indiana;

(9) include a written guarantee signed by the vendor that the voting systems obtained by the county comply with all requirements of Indiana and federal law in effect as of the date of the amended application for Section 102 monies;

(10) include a certification by the county fiscal body that the Section 102 monies received by the county will be used to pay any outstanding obligation incurred by the county for the voting system purchase subject to the reimbursement;

(11) include a certification by the county fiscal body that if these obligations have already been paid in full or in part by the county, that any remaining Section 102 reimbursement funds will be used to improve the administration of elections for federal office in the county.

The Election Division may prescribe that other information be included in the amended application, and shall assist each county in amending the previously filed application.

The Secretary of State with the consent of the Co-Directors of the Election Division will, to the extent possible, review the amended applications as expeditiously as possible upon receipt and no later than November 2003. No later than December 1, 2003, the Secretary of State plans to submit recommendations to the State Budget Committee regarding these applications. After completion of Budget Committee review and authorization by the Budget Agency, the Secretary of State will work with the Auditor of State and Treasurer of State to ensure the prompt disbursement of the Section 102 funds to these counties.

If a county which contains qualifying precincts did not file an application for voting system reimbursement before January 31, 2003, the Election Division shall promptly notify the county circuit court clerk that the county must file an application no later than October 31, 2003 to receive the initial disbursement of Section 102 money under this Plan. The Election Division shall prescribe the form of the application to be used by the county to request reimbursement. However, the application must contain at least the information contained in the version of the application filed by counties before January 31, 2003, and the information required for amended applications.

The deadline for a county to ensure that a polling place complies with the accessibility requirements set forth in Indiana Code 3-11-8-6 may be extended to March 31, 2006 if it is impossible or impractical for the county to ensure compliance by October 1, 2004.

Application for Title III Requirement Monies and State Matching Funds

After the State receives the Title III requirement monies and state matching funds to be disbursed during 2003, the Election Division shall notify all counties that an application may be submitted for reimbursement of voting system purchases. This notice must specify the first and final dates for filing the application and the information required to be submitted as part of the application.

Unless the original application already contains this information, the application for Title III requirement monies and state matching funds must:

(1) list the name of each precinct in the county as of the date of the application;

(2) list the physical location (and mailing address if available) of the polling place designated in November 2002 (or that will be designated in the May 2004 election) to serve the residents of that precinct;

(3) state that the county election board will cooperate with the polling place accessibility survey scheduled for May 2004, subject to any amendments required to state law to permit access to polling places by survey personnel;

(4) certify that the county will make all permanent or temporary improvements to the polling place for the precinct no later than October 1, 2004 to comply with the accessibility standards set forth in state law (Indiana Code 3-11-8), and to the extent possible, make any additional improvements identified in the May 2004 survey that are not specifically required by state or federal law;

(5) certify that, as of December 31, 2005, the polling place used for the precinct will contain at least one voting system to permit a voter who is blind or visually impaired to vote privately and independently in accordance with Public Law 209-2003;

(6) certify that no later than December 31, 2003, the county will adopt an ordinance establishing a local advisory council comprised of representatives of the disabilities community and elderly voters to provide assistance in choosing accessible polling places;

(7) the date the county entered into a contract for the purchase, lease, or lease-purchase of voting system. (An executed and attested copy of the contract or adequate evidence of a contract must be attached);

(8) whether this purchase or lease was entered into under a state quantity purchase agreement with a vendor certified to market voting systems in Indiana;

(9) a written guarantee signed by the vendor that the voting systems obtained by the county comply with all requirements of Indiana and federal law in effect as of the date of the amended application for Title III requirement monies;

(10) include a certification by the county fiscal body that the monies received by the county will be used to pay any outstanding obligation incurred by the county for the voting system purchase subject to the reimbursement;

(11) include a certification by the county fiscal body that if these obligations have already been paid in full or in part by the county, that any remaining funds will be used to improve the administration of elections for federal office in the county.

The Election Division may prescribe that other information be included in the application, and shall assist each county in amending any previously filed application.

In the review of applications for disbursement of Title III requirement monies and state matching funds, the State shall follow the same procedures described in this Plan for the disbursement of Section 102 monies.

Upon receipt of Title III requirement monies and state matching funds after 2003, the same application review process will be used. However, the deadline for a county to ensure that a polling place complies with the accessibility requirements set forth in Indiana Code 3-11-8-6 may be extended to March 31, 2006 if it is impossible or impractical for the county to ensure compliance by October 1, 2004.

Application for Section 101 funds

The Team recommends that the Section 101 funds budgeted for voting system reimbursement be expended for reimbursement for the purchase of voting system after January 1, 1998 and before July 1, 2001 if the voting system meets the standards permitting reimbursement under Indiana Code 3-11-6.5. HAVA permits Section 101 funds to be expended for improving the administration of elections for federal office, including replacing voting systems, but does not specify any time limits during which the replacement must be made to qualify for reimbursement from these funds.

Unless the original application already contains this information, the application for Section 101 monies must:

(1) list the name of each precinct in the county as of the date of the application;

(2) list the physical location (and mailing address if available) of the polling place designated in November 2002 (or that will be designated in the May 2004 election) to serve the residents of that precinct;

(3) state that the county election board will cooperate with the polling place accessibility survey scheduled for May 2004, subject to any amendments required to state law to permit access to polling places by survey personnel;

(4) certify that the county will make all permanent or temporary improvements to the polling place for the precinct no later than October 1, 2004 to comply with the accessibility standards set forth in state law (Indiana Code 3-11-8), and to the extent possible, make any additional improvements identified in the May 2004 survey that are not specifically required by state or federal law;

(5) certify that, as of December 31, 2005, the polling place used for the precinct will contain at least one voting system to permit a voter who is blind or visually impaired to vote privately and independently in accordance with Public Law 209-2003;

(6) certify that no later than December 31, 2003, the county will adopt an ordinance establishing a local advisory council comprised of representatives of the disabilities community and elderly voters to provide assistance in choosing accessible polling places;

(7) list the date the county entered into a contract for the purchase, lease, or lease-purchase of voting system. (An executed and attested copy of the contract or adequate evidence of a contract must be attached);

(8) state whether or not this purchase or lease was entered into under a state quantity purchase agreement with a vendor certified to market voting systems in Indiana;

(9) include a written guarantee signed by the vendor that the voting systems obtained by the county comply with all requirements of Indiana law in effect as of the date of the amended application for these monies;

(10) include a certification by the county fiscal body that the monies received by the county will be used to pay any outstanding obligation incurred by the county for the voting system purchase subject to the reimbursement;

(11) include a certification by the county fiscal body that if these obligations have already been paid in full or in part by the county, that any remaining funds will be used to improve the administration of elections for federal office in the county.

The Election Division may prescribe that other information be included in the application, and shall assist each county in amending any previously filed application.

In the review of applications for disbursement of Section 101 monies, the State shall follow the same procedures described in this Plan for the disbursement of Section 102 monies. However, the deadline for a county to ensure that a polling place complies with the accessibility requirements set forth in Indiana Code 3-11-8-6 may be extended to March 31, 2006 if it is impossible or impractical for the county to ensure compliance by October 1, 2004.

New Precincts

The Team recognizes that in certain counties, new precincts may be established before December 31, 2005 to accommodate population growth. Although a new precinct would not be a qualifying precinct for which Section 102 monies would be available, the county will be required after that date to provide a fully accessible voting system for voters with disabilities at the polling place designated for the precinct. As a result, the Team recommends that this Plan be reviewed during early 2005 to determine the number

of new precincts created or expected to be created before 2006; availability of Title III requirement monies and other HAVA funds to reimburse counties for voting system purchases for these precincts; and whether further legislation is necessary to permit more precincts to use the same polling place, and thereby reduce the number of voting systems that a county must acquire.

General Procedures for Voting System Application Review

The Secretary of State and Election Division shall prescribe: (1) the periods during which reimbursement applications may be submitted; and (2) the content of the applications. The Secretary of State and Election Division will strive to provide counties with all available information regarding the schedule for administration of the voting system reimbursement program to enable counties to take the impact of the program into account as part of the county's process for adoption of its annual budget.

The Secretary of State and Election Division may recommend that any application be approved in whole, or in part. The recommendation may provide that action on part of an application be deferred pending further information or availability of funds, or rejected.

All recommendations regarding applications submitted during a specific application cycle may be forwarded to the State Budget Committee at one time. However, it is more likely that each application will be forwarded as soon as the recommendation for that application is complete. Likewise, the Secretary of State will strive to secure the disbursement of funds to a county as soon as possible following approval of the county's application, rather than waiting for all applications in a specific application cycle to be approved or rejected by the State Budget Committee and Budget Agency.

In determining the recommendation regarding an application, the Secretary of State and Election Division must consider whether a precinct currently contains any voters (or contained any voters in 2000). If the precinct does not (or did not), the recommendation must not provide for reimbursement for that precinct as a qualifying precinct, or for reimbursement from any other HAVA funds.

Absentee Voting Systems in Central Location

If an application requests reimbursement for voting equipment used for casting or counting absentee ballots at a central location, or casting ballots at a polling place located at the office of the circuit court clerk or county election board, the Secretary of State and Election Division shall determine whether the equipment or software is used primarily for the casting or counting of votes. If the equipment or software is used primarily for voter registration purposes or other election administration purposes, the recommendation must not provide for reimbursement for the equipment or software.

Determination of Reasonable Costs

In reviewing applications for voting system reimbursement, the Secretary of State and Election Division shall determine whether the contract provides for products and services to be provided to the county by a vendor at a cost that is reasonable and in accordance with standard business practices in Indiana. The recommendation may not provide for reimbursement of clearly excessive or unreasonable costs. In making this determination regarding the cost of products, a product which costs no more than the cost provided for in a quantity purchase agreement entered into by the vendor with the State is considered a reasonable cost for the product.

State and Federal Auditing

Before the Secretary of State and Election Division recommend the approval of any application for voting system reimbursement, the county fiscal body and county executive must enter into an agreement with the State obligating the county to refund to the State an amount equal to the amount of the grant received by the application if the Secretary of State and Election Division determine on March 1, 2006 that: (1) in the case of Section 102 monies, the county has not replaced lever voting machines or punch card voting systems in each precinct of the county no later than December 31, 2005; (2) in the case of other HAVA funds, the county has not provided a voting system in each polling place that complies with the accessibility requirements for voters described above; and (3) in any case, that the county has not honored one or more of the certifications the county made regarding the polling place accessibility or permitted uses of fund. The agreement must provide that the county will refund the amount no later than May 1, 2006.

The agreement must also require the county to submit a report to the Election Division not later than December 31, 2004, (or if the reimbursement was approved after 2003, not later than December 31, 2005). The report must list the accessibility problems identified in the May 2004 survey of polling places, and whether these problems have been resolved by temporary or permanent improvements,

or whether the polling place has been relocated to an accessible facility. If the report indicated that the problems have not yet been resolved, the report must indicate how the county will resolve the problem no later than March 31, 2006. The Election Division may require additional reports from a county until the county reports that the polling place accessibility problems identified in the May 2004 survey have been resolved. A report from a county under this paragraph must be certified as accurate by majority vote of the county election board, following review and the opportunity by the local advisory council to add written comments to the report.

Local Advisory Council

A county's local advisory council may consist of any number of members, but must include at least two (2) representatives of the disability communities or elderly voters. The membership of the council shall be appointed by the county executive, who shall encourage county residents with a variety of backgrounds, partisan affiliations, and perspectives to participate. If county residents are not available to serve on the council, the county executive may partner with the Governor's Planning Council for People with Disabilities to carry out the functions of the council.

Indiana Bond Bank Services and Multi-County Purchase Agreements

The Team recommends that the Secretary of State and Election Division encourage reimbursement policies that will result in the most efficient use and widespread impact of the funds available for voting system reimbursement. For example, counties should be encouraged to explore borrowing funds at low rates from the Indiana Bond Bank to reduce financing costs prior to reimbursement and entering into multi-county purchase agreements with other counties to reduce procurement costs though quantity purchasing. *See Appendix 2*

Cost Savings

Likewise, subject to the limitations set forth in HAVA, P.L. 209-2003, and federal auditing standards, counties should be encouraged to negotiate purchases for voting system hardware and software at prices below the amount set by the state quantity purchase agreements or the reimbursement schedule set forth in this Plan.

The Team notes that Indiana law specifically provides that applications must be for voting system *reimbursement*, which implies a previous outlay of funds or a contractual obligation to do so in the future. The reimbursement schedule for hardware and software set forth in this Plan is not a "draw down" account with funds available to a county for subsequent purchases outside of the application process.

Supplemental Application

However, the Team recommends that if a county purchases software or hardware for an amount less than the amount available for allocation to the county under the reimbursement schedule set forth in this Plan, that the county be permitted to submit a supplemental application for reimbursement in an amount that does not exceed the amount saved by the county in its purchase of software or hardware at a cost below the amount in the Plan's reimbursement schedule. This supplemental application could be submitted at the same time as the county's initial voting system reimbursement application or at any later date.

A supplemental application for reimbursement should only be recommended for approval if the reimbursement would be for an expenditure permitted by HAVA or state law to be made from the applicable HAVA account and if the SOS and IED determine that the county submitting the supplemental application has complied with all Title III requirements under HAVA or is requesting reimbursement to do so.

Expenses eligible for reimbursement

If an application is made for reimbursement of voting system expenses from Title III requirement monies, a supplemental application could request reimbursement for expenditures made by the county to comply with any HAVA Title III requirements. These expenditures would include the purchase of additional voting systems that provides full access to voters with disabilities; training and other materials related to provisional ballots (not the ballots themselves); costs related to the identification of the mail-in registrants required to produce additional documents and mailings to those voters. However, reimbursements for purchasing voting systems before November 2000 would not qualify since these purchases are not covered under the Title III requirement payments.

Operational expenses, legal expenses, paper expenses, and interest expenses may be eligible for reimbursement.

The same restriction would apply to a supplemental application requesting voting system reimbursement from state matching funds, since HAVA Section 253(b)(5) requires that the State appropriate these funds for "carrying out the activities for which the requirements payment is made." As a result, these state matching funds would presumably be subject to the same use restrictions as the federal Title III requirement monies received by the State.

Likewise, if an application is made for reimbursement of voting system expenses from Section 102 monies, a supplemental application could request reimbursement only for purchasing additional voting systems to replace lever machines or punch card voting systems after November 2000.

However, if an application is made for reimbursement of voting system expenses from Section 101 monies, a supplemental application could request reimbursement for purchasing voting systems after January 1, 1998 and before July 1, 2001 if the voting systems meets the standards permitting reimbursement under Indiana Code 3-11-6.5, as amended in 2003. HAVA permits Section 101 funds to be expended for voting system replacement that improves election administration in a state, but does not specify any time period during which the purchase must have been made to qualify for disbursement.

To ensure that the disbursement of these funds comply with HAVA and P.L. 209-2003, the Secretary of State and Election Division must specify the accounts that are the source of each disbursement made for voting system reimbursement. For accounting purposes, this Plan assumes that disbursements will be made from available funds in the following order: Section 102 funds; Title III requirement monies; state matching funds. Disbursements from Section 101 funds for voting system reimbursement will not be made in any year until the Section 102 funds, Title III requirement monies, and state matching funds available in that fiscal year have been disbursed.

Use of Traditional Paper Ballots

It is possible that a county may choose not to apply for reimbursements for voting system upgrades or may not qualify for the reimbursement sought by the county's application. In that case, Public Law 209-2003 will require that county to cease using any lever voting machine or punch card voting system currently used by the county no later than December 31, 2005.

If the county has not acquired a voting system by that date which complies with HAVA, the only remaining option for the county under Indiana law is to use traditional paper ballots to conduct the election. In any event, the county must acquire at least one fully accessible voting system for each polling place for use by blind voters or voters with other disabilities. The Team recommends that the Secretary of State and Election Division monitor the situation in counties which currently use lever machines or punch card voting systems to determine whether additional legislation will be necessary in 2004 or 2005 to complete the phase-out of these obsolete voting systems.

B. Statewide Voter Registration System

The Secretary of State with consent of the Co-Directors will implement a statewide voter registration system that complies with Title III HAVA requirements. A team of circuit court clerks, voter registration officials from different sized counties, and Statewide Voter File subgroup members will serve in an important advisory role in the selection of a vendor, development of the system, and the conversion of data for the system. The use of an independent consultant disqualified from submitting a response to the Request for Proposal for the statewide voter registration system will assist in providing necessary guidance from an entity with no financial interest in the final product.

Waiver Recommendation for the Statewide Voter Registration System

The Team recommends that the Secretary of State and the Co-Directors of the Election Division request the waiver authorized under HAVA and Public Law 209-2003 to extend the deadline for implementation of the statewide voter registration system until January 1, 2006.

Statewide Voter Registration System Costs

The development costs of the statewide voter registration system will be assumed by the State, using Title III requirement monies, and to the extent necessary, supplemented by Section 101 funds and State matching funds. The consultant hired to develop the systems requirement document will seek to identify any opportunities for efficiency and savings that may be available from using existing or planned statewide networks to share pipeline space and to conduct coordinated training events with the administrators of those systems. However, any such coordination would be subject to the deadlines set by HAVA and Public Law 209-2003 for

the statewide system to become operational and to ensure that the responsibility for system administration remains vested in the Secretary of State and the Election Division, as provided by P.L. 209-2003.

Replacement and upgrade of voter registration system software

The "development costs" to be assumed by the State include the hardware and software necessary for the system to perform its functions.

Voter Registration System Training

Likewise, training both State and county voter registration administrators will be a significant development cost to the State. The systems requirement document will request potential vendors to propose a comprehensive training program to ensure that county voter registration personnel become familiar with the features of the system before it becomes fully operational.

There will be some incidental or indirect costs associated with the development of the statewide voter registration system which this Plan anticipates will be borne by the county. These costs include county employee compensation and overtime and travel and lodging expenses for attendance at some training and conference events. Nonetheless, the state will seek to cover all necessary and reasonable costs associated with the development of the voter registration system to the extent that funding is available. In addition, if a county chooses to lease or purchase additional hardware or to provide training beyond what the State provides to ensure the maintenance and proper operation of the system, the county would be responsible for those costs.

Voter Registration Software Upgrades before 2006

The Team recommends that any county considering the replacement or upgrading of its voter registration software between now and the implementation of the statewide voter registration system during 2005 carefully consider the costs and benefits of that software purchase. If a county voter registration office determines that replacing or upgrading its software is necessary to ensure success in administering the 2004 general elections, then this purchase may be advisable. However, if the replacement or upgrade would result in only marginal improvement at most to the county's voter registration system, then the county may wish to consider deferring the purchase until the statewide voter registration system begins operation. If the county determines that a feature of the proposed software program is very desirable, then the county should communicate its views to the members of the Steering Committee, who can suggest that this feature be included in the systems requirement document for the statewide voter registration system.

The following will be necessary:

- The Secretary of State, with the consent of the Indiana Election Division, shall develop, maintain and support the system.
- The Indiana Election Division shall develop interaction between the voter registration system and the provisional ballot status application.
- The Indiana Election Division will be responsible for continuous training opportunities on the new system.
- The Request for Proposal (RFP) for statewide voter registration system shall offer poll list printing as an option for counties.
- The county clerks and voter registration officials will continue to be responsible for voter list maintenance, creation and production of poll lists, street file management and jurisdictional boundaries, jury lists, petition verification and specialized reports.

The unique identifier for an individual who has not provided a driver's license number will be the birth date (MMDDYYYY), a hyphen, and then the last four digits of the social security number (MMDDYYYY-XXXX). If the social security number is unavailable, the voter will be assigned another unique identifier by the Indiana Election Division (after December 31, 2005). This unique identifier must be the individual's Bureau of Motor Vehicles identification number, or if the individual does not have a BMV ID card, another unique number assigned by the Indiana Election Division.

The monies that will be set aside for the statewide voter registration system is within the range of $7 to 11 million. The state will use a portion of the early payments money (Section 101 funds) to pay a consultant who will work with the Information Technology Oversight Commission to begin developing the Request For Proposal for the statewide voter registration system project because this process will begin before the state receives any Title III funding. However, the Section 101 money will be reimbursed from Title III money once it is received.

C. Training and Education

The Indiana Election Division is currently responsible for annually providing election official training to county circuit court clerks, incoming county circuit court clerks and county election board members.

Each county's maintenance of effort includes training for the poll inspector and in some instances the poll judges and clerks. Indiana law requires that inspectors and judges be trained. The law also requires that training must include information related to making polling places and voting system accessible to elderly and disabled voters. Therefore, HAVA monies will be utilized to expand this training to include training opportunities for the poll clerks and judges. There will be additional costs associated with training voters and poll workers on new voting equipment and provisional balloting as well as the printing and posting of the Voter's Bill of Rights. It is expected that many first time poll workers including those from secondary schools and colleges, recruited under a new program authorized by HAVA, will need to be trained.

Opportunities will be sought for coordinating training with other interested parties and advocacy groups. During the annual meetings of the Association of Indiana Counties, Indiana Association of Cities and Towns, and Association of Circuit Court Clerks, sessions will be available regarding local election administration. The Indiana Election Division will develop training aimed at attorneys so they may qualify for continuing legal education credits (CLEs) required by the Indiana Supreme Court. A poll worker certification program will be developed as an incentive and positive reinforcement of the poll workers' efforts.

The state will develop an application process for distribution of training and education funds.

Starting in 2003 and continuing over the next 2 years, IED will conduct additional seminars for clerks and county voter registration officials solely dedicated to new election administration issues and procedures.

Neither the state nor a county has voter education included in their maintenance of effort.

The proposed budget sets aside $3.9 million for Training and Education.

D. Provisional Ballots

In the 2001 legislative session, authorization for provisional balloting beginning with the 2004 primary election was provided. However, additional requirements to build a free access system, provide written documentation to provisional voters and protect provisional ballot voters' confidentiality are new under HAVA; these were addressed by additional Indiana legislation enacted in 2003. At the time the document was written, the Secretary of State's office envisions interaction between the systems used for the statewide voter registration system application and a provisional ballot status application. Once the statewide grievance toll-free line is available, the state anticipates using that line for the provisional ballot status notification process.

E. Grievance Procedure

HAVA requires the establishment of a state based administrative complaint procedure that will remedy grievances concerning Title III which include but is not limited to (1) voting system accessibility, (2) polling place accessibility, (3) any part of the voting process itself, (4) registration process, or (5) allegation of fraud. The details of this grievance procedure are explained under Section 9 (page 49) of this plan.

The proposed budget sets aside $500,000 for administration of the grievance procedure. A county may apply for grants to assist in the development of the optional county grievance procedure. The Indiana Election Division in consultation with the Secretary of State will establish guidelines to evaluate applications submitted for this purpose.

F. Accessibility of Polling Place and Materials

The Secretary of State's office will form a partnership with the Governor's Planning Council for People with Disabilities (GPCPD) to conduct a statewide polling place accessibility study that will establish a baseline of Indiana's current environment as it relates to polling place accessibility. Each county will also form a local advisory council composed in part of voters with disabilities and elderly voters. The GPCPD will supply suggested members for the local advisory councils upon request. This council will advise the local officials on polling place accessibility and site selection. The survey and the establishment of the local council will be a required criteria for counties applying for reimbursement for voting systems.

Information will be provided by the Indiana Election Division to local election officials with suggestions about making their written materials and websites more accessible to voters with disabilities. The information will be created and organized by the GPCPD. Additional outreach will be directed toward military and overseas voters.

Currently, neither the state nor local officials have a maintenance of effort requirement for polling place accessibility or for the updating of materials and websites into accessible formats.

HAVA requires that voting systems provide alternative language accessibility as described in the Voting Rights Act of 1965. Using data from the 2000 United States Census, Indiana's population of non-English speaking residents does not meet the level that requires provision of voting information and materials in other languages. However, as the population of non-English speaking Hoosiers continues to increase, Indiana is taking steps to offer materials related to direct voter communication in the languages that are most prevalent. Currently, the Voter's Bill of Rights and the Application for Voter Registration Form are available in Spanish. As federal funds are available, the Indiana Election Division will translate more documents.

G. Administration

The proposed budget sets aside $500,000 for the administration of HAVA requirements.

H. Strategic Reserve

The proposed budget sets aside at least $2 million from Section 101 funds as a strategic reserve to be used to meet any HAVA requirement if the initial amount budgeted for meeting that requirement is not sufficient. The amount in this reserve will be increased to a total of $6 million to the extent that the statewide voter registration system costs less than the maximum $11 million budgeted for that project. The Team also recommends that any savings achieved in other projects be reallocated to the strategic reserve to ensure that all HAVA requirements are met and to avoid any required refunding of federal HAVA dollars by the State. If these savings are derived from projects funded with monies other than Section 101 monies, strategic reserve funds may actually be present in more than one account to recognize the use restrictions imposed on each HAVA account.

The Team's future review of Indiana's HAVA compliance may then lead to the reallocation of some funds held in strategic reserve to address requirements that have not been fully met at that time. In addition, the Team recommends that any of the $2 million in Section 101 funds remaining in strategic reserve after the expenses for fulfilling HAVA requirements have been fulfilled be available for voting system reimbursement for counties which are eligible for reimbursement from the Election Administration Assistance Fund (Indiana Code 3-11-6.5), but which are not eligible for reimbursement using Title III requirement monies.

The Team recognizes that in addition to the statewide voter registration file, the HAVA requirement that each polling place be provided with a voting system that is fully accessible to a voter with disabilities may result in significant expenditures by counties to comply with this requirement. The Team views the expenditure of any necessary funds from the strategic reserve to accomplish this purpose and to prevent required refunding of federal HAVA dollars as an appropriate use of funds in the strategic reserve.

Section 7

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(7) How the State, in using the requirements payment, will maintain the expenditures of the State for activities funded by the payment at a level that is not less than the level of such expenditures maintained by the State for the fiscal year ending prior to November 2000.

The Secretary of State will not use the requirements money to maintain the level of expenditures previously incurred by the state for election administration. For fiscal year ending June 30, 2000, the State of Indiana was not expending funds for any tasks required under Title III, including provisional ballots, documentation for first-time mail-in registrants or DREs for the disabled, except as provided below.

In 2000, counties were spending local monies on voter registration maintenance and voting system equipment.

The current duplicate voter registration elimination program will no longer be utilized after 2005 under Public Law 209-2003. However, approximately $225,000 was expended to conduct this program in 1999 - 2000 to compile a statewide voter registration

system and will require a maintenance of effort.

Section 8

Sec. 254 (a) IN GENERAL – The State plan shall contain a description of each of the following:

(8) How the State will adopt performance goals and measures that will be used by the State to determine its success of units of local government in the state in carrying out the plan, including timetables for meeting each of the elements of the plan, descriptions of the criteria the state will use to measure performance and the process used to develop such criteria, and a description of which official is to be held responsible for ensuring that each performance goal is met

Performance Goal 1: Statewide Voter Registration System.
For compliance with HAVA and in order to receive and use requirements money, Indiana will build a "state of the art" system that will be centrally administered. It will provide the best election tools to the state's local election and registration officials and will incorporate the best features from Indiana county voter registration systems. This system will expand the current relationship between the county and state on operating the duplicate elimination program for list maintenance. It will be necessary to have an interface allowing the system to receive updates from the Bureau of Motor Vehicles, Department of Correction and the Indiana State Department of Health. A steering committee and an independent consultant will be used to guide the process.
(see chart on following page)

Performance measure 1	Number of counties online Number of voters per county Percent of data conversion to standard format completed automatically Number of digitized signatures captured Number of voting histories captured Number of ID numbers captured Number of ID numbers matched Number of hits concerning provisional ballot status Number of hits for polling place locator
Timetable	Now through January 1, 2006
Description of the criteria used to measure performance	Conversion of county registration records is vital to the base file. Reports should be generated from partner agencies to help evaluate the success of file maintenance.
Process used to develop criteria	Success of the system will be dependent upon the capture, migration, and standardization of voter registration information into the central voter registration database.
Description of official to be held responsible for ensuring each performance goal is met	The Secretary of State and the Indiana Election Division are responsible for implementing the statewide voter registration system. The Indiana Election Division is also responsible for training, support, and ongoing maintenance of the system. The Indiana Election Division will coordinate with all 92 county voter registration officials, BMV, DOC, and Indiana State Dept. of Health.

Performance Goal 2: Training and Education

All Indiana state and local election and voter registration officials realize the success of HAVA implementation relies heavily on communication among or between the participants in the process. Opportunities for training are present at all levels from year round election officials to poll workers and voters that may only interact with the process one or two times a year.

Performance Goal 2.a	The following information will be collected to measure election official training performance: Number of people trained in county election office Total number of employees in county election office Number of people trained in voter registration office Total number of employees in voter registration office Number of people in each county certified for the first time Number of people in each county re-certified Number of training classes/opportunities offered
Timetable	December 31, 2003 and annually thereafter with possible exception in off election year (no municipal or federal election)
Description of criteria used to measure performance	The Secretary of State will prepare and submit a local election and voter registration official training report containing HAVA related information to be filed on the Secretary of State's web site annually.
Process used to develop the criteria	The state already provides training for county election officials. Further steps will be taken to ensure all employees of agencies responsible for "full service" voter registration duties are trained on changes related to HAVA. In addition, election/voter registration certification program will be developed.
Description of official to be held responsible for ensuring each performance goal is met.	The Secretary of State through the Indiana Election Division is responsible for election official training.

Performance Goal 2.b	Number of poll worker positions available Number of poll clerks trained by instructors in classroom Number of poll clerks trained by video Number of poll clerks trained on the web Repeat statistics for poll judges and sheriffs Number of high school and college students contacted by county election officials Number of ID documentation information pieces collected Number of provisional ballots cast Number of CLEs earned by attorneys Number of new persons recruited to work polls Number of complaints or grievances filed Whether exit poll questionnaire was executed Percentage of poll workers who attended training
Timetable	January 1, 2004 and every election thereafter
Description of the criteria used to measure performance	Local election officials will submit this information semi-annually to the Indiana Election Division following an election.
Process used to develop criteria	Election officials already conduct some poll worker training. The Indiana Election Division will rely on input from local election officials (and perhaps professional trainers) to develop both the content and evaluation criteria for the program.
Description of official to be held responsible for ensuring each performance goal is met	The Indiana Election Division shall establish training guidelines, tools, CLEs and the certification program. Each county will continue to oversee poll worker training.

Performance Goal 2.c	Number of public display sites for voter education Number of NCAS or PSAs (public service announcements) Number of ads, news releases or news stories Number of web hits on video streaming Number of teachers certified to instruct on voting systems Number of videos or power point slide shows distributed Number of speeches given by county election or voter registration officials Number of high schools and colleges contacted Increase in percentage of voter turnout
Timetable	January 1, 2004 and every election thereafter
Description of the criteria used to measure performance	Local election officials will submit this information semi-annually to the Indiana Election Division following an election.
Process used to develop criteria	These steps are being taken to ensure voters receive information on HAVA and related election processes
Description of official to be held responsible for ensuring each performance goal is met.	The Indiana Election Division is responsible for developing these training tools. Each county will be responsible for implementation and reporting.

Performance Goal 3: Grievance

HAVA requires the establishment of a state-based grievance procedure.

Performance Goal 3	The following information will be collected to measure the effectiveness of the grievance process: The number of calls received The number and nature of complaints filed The number of complaints dismissed The number of complaints resolved by the Indiana Election Division The number of complaints resolved by the Indiana Election Commission The number of complaints resolved by an Arbitrator The average time for a complaint to be investigated and resolved
Timetable	January 1, 2004 and every election thereafter.
Description of the criteria used to measure performance	The Secretary of State will review the reports from the Indiana Election Division and the counties.
Process used to develop criteria	The Indiana Election Division will also submit a report containing number of complaints received, number of complaints resolved and time required/ used for resolution.
Description of official to be held responsible for ensuring each performance goal is met	The Indiana Election Division and Indiana Election Commission are responsible for administering the Statewide grievance procedure. The Protection and Advocacy Commission will assist with administering the grievance procedure as it relates to persons with disabilities.

Performance Goal 4: Provisional Ballots

The following shall be measured regarding provisional ballots: uniform processing, verification and status availability. In the beginning, provisional ballot status reporting will be done by each county until the implementation of the statewide voter registration

system. The goal is to have uniform procedures in place in each county for processing and verification of provisional ballots.

Performance Goal 4	Number of provisional ballots cast in each precinct Number of voters casting a ballot in each precinct at that election Number of provisional ballots verified and counted for each precinct Number of provisional ballots not counted in each precinct and reason Number of voters who checked their provisional ballot status Whether uniform procedures were followed
Timetable	January 1, 2004 and every election report thereafter
Description of the criteria used to measure performance	The election report from each county (until implementation of statewide voter file) will provide the Secretary of State with an indication of what additional tools may be needed for uniformity. The statewide voter registration system will be used to report and track the above figures when the system becomes operational.
Process used to develop criteria	The Indiana Election Division will enhance the county election administration manual regarding provisional ballot procedures and information.
Description of official to be held responsible for ensuring each performance goal is met	The Indiana Election Division, through its election official training and county administrative manual, will be responsible for uniform guidelines for processing and verifying provisional ballots. County election officials will be responsible for provisional ballot verification, counting and reporting. Status of provisional ballots will become a joint effort between the state and county once the statewide voter registration system becomes operational.

Performance Goal 5: Accessibility

One of HAVA's greatest initiatives is to make the election process more accessible. Indiana will address voting equipment first, with a link to polling place accessibility. Indiana would also like to utilize part of Title III requirement monies remaining after voting system reimbursement to address accessibility issues through training and provide materials and web information in accessible formats.

Performance Goal 5	Number of military/overseas absentee applications Number of military/overseas ballots cast Number of military ballots rejected and reason(s) therefore Number of polling places Number of polling places accessible Number of DREs w/accessible devices Number of DREs w/out accessible devices Number of IED accessibility brochures distributed Number of accessibility complaints received and resolved Whether Indiana Election Division website and materials are available in accessible formats Whether county met with local advisory council
Timetable	January 1, 2006 for voting system with accessible equipment and January 1, 2004 and beyond for other goals.
Description of the criteria used to measure performance	Local election officials will submit this information semiannually to the Indiana Election Division following an election.

Process used to develop criteria	The application for reimbursement of voting systems monies will include certification of polling place accessibility.
Description of official to be held responsible for ensuring each performance goal is met	The county will be responsible for certifying polling place accessibility on the application for reimbursement to the Indiana Election Division. The Indiana Election Division will make sure the Election Division website is in an accessible format. Governor's Planning Council for People with Disabilities will help coordinate statewide polling place survey.

Section 9

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(9) A description of the uniform, nondiscriminatory State-based administrative complaint procedures in effect under section 402.

Under HAVA, an individual who believes there is (or has been) a violation of any provision of Title III may file a complaint. Such complaint may include, but is not necessarily limited to the following: (1) voting system accessibility, (2) polling place accessibility, (3) any part of the voting process, (4) registration process, or (5) allegation of fraud. The Secretary of State and local election officials will establish a free access system to begin the grievance process.

Indiana Code 3-6-4.5 establishes the state based administrative complaint procedures to remedy grievances concerning uniform and nondiscriminatory election technology and administrative requirements under Title III. The procedures must be uniform and nondiscriminatory.

An individual who believes there is a violation of any provision of Title III, including a violation that has occurred, is occurring, or is about to occur, may file a complaint with the Indiana Election Division. The complaint must be written, signed, and notarized. The complaint must state the following: (1) name and mailing address of the individual alleged to be committing the violation of Title III described in the complaint, (2) whether the individual filing the complaint has filed a complaint concerning the violation with a county election board, and (3) the nature of the injury suffered (or about to be suffered) by the individual filing the complaint. The complaint form and instructions will be available on the Secretary of State's web site www.sos.IN.gov.

An individual may also file a complaint with the county election board where the violation allegedly occurred. The Indiana Election Division shall not begin enforcement procedures regarding the complaint until the individual files a complaint with the Indiana Election Division. If the complaint alleges that either Co-Director of the Indiana Election Division has committed the violation, the aggrieved person shall file the complaint with the chair of the Indiana Election Commission. The chair shall perform the duties otherwise performed by the Indiana Election Division concerning a complaint. The Indiana Election Division (or commission) may consolidate complaints filed under this chapter.

The Indiana Election Division shall determine whether a complaint filed under this chapter describes a violation of Title III using the assumption that the facts set forth in the complaint are true. If the Indiana Election Division determines that there is no violation of Title III or the individual did not comply with the written requirements stated above, the Indiana Election Division shall dismiss the complaint and publish the order dismissing the matter in the ***Indiana Register***. If the complaint is dismissed, a copy shall be provided to the following: (1) the individual who filed the notice; (2) the individual alleged to have committed the violation; (3) the members of the Indiana Election Commission, and (4) the Indiana Attorney General.

If the Indiana Election Division determines that the complaint alleges a violation of Title III using the assumption that facts alleged in the complaint are true and that the individual complied with the written requirements, the Indiana Election Division shall conduct an investigation. Upon completion of the investigation, the Indiana Election Division shall submit the results to the Indiana Election Commission which shall then issue a written report. A copy of the report shall be provided to the following: (1) the individual who filed the complaint, (2) the individual alleged to have committed the violation; (3) the members of the Indiana Election Commission; and (4) the Indiana Attorney General. The report must indicate the date that the complaint was received by the Indiana Election Division, recite the findings of facts, and state whether a violation of Title III has occurred or is likely to occur. If a violation has occurred the report must also indicate steps taken to correct the violation or prevent a reoccurrence of the violation, any measures that could be taken to correct a violation, the date when a violation was corrected or is expected to be corrected and any additional information or recommendations useful in resolving the complaint.

At the request of the individual filing a complaint or the request of a member of the commission, the commission shall conduct a hearing on the complaint and prepare a record of the hearing. A request for a hearing must be filed with the Indiana Election Division not later than noon seven days after the report is mailed by the Indiana Election Division. After concluding the hearing, the Indiana Election Commission shall do the following: (1) affirm the report; (2) amend the report; or (3) refer the matter to the Indiana Election Division for further investigation and submission of a subsequent report to the Indiana Election Commission. If the Indiana Election Commission finds that there is no violation, the commission shall dismiss the complaint and publish the order of dismissal in the ***Indiana Register***. If the Indiana Election Commission determines that there is a violation of any provision of Title III, the Indiana Election Commission shall determine and provide the appropriate remedy if authorized by law to do so.

The Indiana Election Commission shall forward a written summary of any action taken by the commission by certified mail to the following: (1) the individual who filed the notice; (2) the individual alleged to have committed the violation; (3) the members of the Indiana Election Commission, and (4) the Indiana Attorney General.

The Indiana Election Commission shall make the final determination regarding the complaint not later than ninety days after the date the complaint is filed. If the Indiana Election Commission fails to make a final determination (or the Indiana Election Commission ties 2-2) within ninety days, the complaint shall be resolved by referral to an arbitrator selected jointly by the commission and the individual who filed the complaint. The record and other materials from any proceeding conducted by the Indiana Election Commission shall be made available for use by the arbitrator. The arbitrator shall file a report with the Indiana Election Division setting forth the resolution of the complaint.

The procedures set forth in Indiana Code 3-6-4.5 are subject to the Indiana Administrative Rules and Procedures Act (IC 4-21.5), which permits judicial review of determinations under the grievance procedure.

Indiana Code 3-6-5.1 establishes a county based administrative complaint procedure to supplement the state based administrative complaint procedure. An individual who files a complaint with the county retains the right to file a complaint with the Indiana Election Division. If the county election board is notified at any time that a complaint has been filed with the Indiana Election Division regarding this matter, the county election board shall dismiss the proceeding.

Section 10

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(10) If the State received any payment under Title I, a description of how such payment will affect the activities proposed to be carried out under the plan, including the amount of funds available for such activities.

Section 101 money will be used, in at least part, to do all of the following:

- Reimburse counties for voting equipment ($2 million). See section 6 for further explanation.
- Create a strategic reserve (at least $2 million). See Section 6 (page 21) for further explanation.
- Statewide voter registration system (to hire consultant), with Section 101 funds used for this purpose being reimbursed from Title III requirement monies. See Section 6 for further explanation.
- Begin to administer HAVA ($500,000)
- Train and educate poll workers and election officials ($1.7 million), with an additional $2.2 million from Title III requirement monies being budgeted to training workers and officials regarding Title III requirements, for an overall training budget of $3.9 million. ($1.4 million will be taken from the Sec. 101 funds for Voter Education)

Section 11

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(11) How the State will conduct ongoing management of the plan, except that the State may not make any material change in the administration of the plan unless the change –

(a) Is developed and published in the Federal Register in accordance with section 255 in the same manner as the State plan;
(b) Is subject to public notice and comment in accordance with section 256 in the same manner as the State plan; and
(c) Takes effect only after the expiration of the 30-day period which begins on the date the change is published in the federal Register in accordance with subparagraph (A)

The Secretary of State through the Indiana Election Division will conduct annual training sessions with county circuit court clerks,

election boards and voter registration officials to review standards and procedures and to assess the goals and objectives of the HAVA state plan.

If the Secretary of State determines the State Plan requires material change, the Secretary of State shall do the following:

1. propose changes to the Vote Indiana Team,
2. allow for public comment for a period of time not less than 30 days and
3. publish the changes in the ***Federal Register*** upon submitting the revised plan to the Election Assistance Commission.

Section 12

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(12) In the case of a State with a State Plan in effect under this subtitle during the previous fiscal year, a description of how the plan reflects changes from the State Plan for the previous fiscal year and of how the State succeeded in carrying out the State Plan for such previous fiscal year.

This version of the State Plan is the initial State Plan required under the Help America Vote Act of 2002. This section will be updated in the next fiscal year, reflecting changes to the State Plan as well as a summary of the 2003 successes.

Section 13

Sec. 254 (a) IN GENERAL – The state plan shall contain a description of each of the following:

(13) A description of the committee which participated in the development of the State plan in accordance with section 255 and the procedures followed by the committee under such section and section 256.

Process

The Vote Indiana Team is comprised of 28 diverse Hoosiers who are all stakeholders in the election process and who bring ethnic, geographic and tri-partisan political diversity to the planning process.

Tasks were assigned to one of our five subgroups: Accessibility, Election Administration, Statewide Voter File, Training and Education, and Voting Equipment. Members served on two subgroups. Members were assigned to two subgroups, one per member's choice and one per chair's discretion to ensure balanced discussions. Members met over a six-month period including twenty-four subgroup meetings, which each lasted 1.5 hours, and five full team meetings. Meetings were held in accordance with Indiana's Open Door Law (I.C 5-14-1.5). Procedures on setting meeting agendas and handling deadlock were established at the first meeting. **Testimony and public comment were specifically sought at each meeting.** Meeting notes were kept of each meeting and made immediately available on the Indiana Secretary of State's website: www.sos.IN.gov. Materials were also available to the public by mail and electronic distribution. On the Secretary of State's website, a listserv permitted any individual with access to the internet to register as a member of the listserv and register any comments regarding the plan.

Letters were sent to each of the Clerks of Circuit Court and to county voter registration officials as local stakeholders advising them of the work of the Team and process involved for developing the state plan. In April, a draft state plan was developed in accordance with discussions from the subgroups, current legislation and ideas where gaps existed. The draft plan was distributed to the full Team for review at their April 11, 2003 meeting. Areas of concern were returned to the respective subgroup in order to reach a consensus. The subgroup's decisions were incorporated into the second draft that was also reviewed by the full Team prior to release for public comment.

The Vote Indiana Team met on May 30, 2003 to review subgroup suggestions and to discuss additional suggestions and comments from the entire group and from members of the public. At the conclusion of that meeting, the Team endorsed the submission of the Preliminary State Plan for public comment.

After revision of the document to reflect the Team's actions at its May 30 meeting, the Preliminary State Plan was made available for public comment beginning June 3, 2003 (See "Public Comment Period and Procedure" under this Section for additional information.).

The Team convened on July 18, 2003 to conduct a meeting to consider all public comment received to date. At the conclusion of

the meeting, the Team recommended the State Plan for submission to the Election Assistance Commission. The Plan will also be published in the ***Federal Register*** and the ***Indiana Register***.

The final version of the State Plan is available on the Secretary of State's website: www.sos.IN.gov.

Public Comment Period and Procedure (June 3, 2003 – July 3, 2003)

Copies of the Preliminary State Plan were available at the Secretary of State's Office, the Indiana Election Division's office and via the website at www.sos.IN.gov. In addition, the Preliminary State Plan was specifically distributed to other interested parties during the public comment period of June 3, 2003 through July 3, 2003. The Vote Indiana Team members' diverse backgrounds directly and indirectly provided the accumulation of the following list.

AARP Indiana
Area Agencies on Aging (Family and Social Services Agency)
Association of Indiana Counties newsletter *Indiana News 92*
Clerks of Circuit Court, county voter registration officials and county election board members
County commissioners, county council members, and county auditors
Freedom's Answer
Governor's Planning Council for People with Disabilities *On Target* newsletter
Interested parties associated with the Governor's Planning Council for People with Disabilities
Indiana Association of Cities and Towns
Indiana Black Legislative Caucus
Indiana Broadcasters Association
Indiana Congressional Delegation
League of Women Voters
Libertarian Party of Indiana Central Committee
Military Officers Association of America – Indiana Chapter
NAACP chapter presidents in Indiana including the State NAACP president
National Association of Latino Elected and Appointed Officials
News Releases to Indiana media, Editorial Board interviews, and letters to editors
Partners in Policy Making Academy coordinated by the Governor's Planning Council for People with Disabilities
Urban League chapter presidents in Indiana
Youth Vote Coalition

Comments were sent to the chair of the Vote Indiana Team in writing at the following address: Todd Rokita, Indiana Secretary of State, 200 West Washington Street, Room 201, Indianapolis, Indiana 46204, or were emailed to VoteIndianaTeam@sos.state.in.us. Public comment on the Preliminary State Plan was also left at 317-234-VOTE or by contacting the Indiana Election Division toll free in Indiana at 800-622-4941(TDD). Comments were also faxed to 317-233-3283.

All comments were distributed to all team members upon receipt. The team considered all public comment at the final VIT meeting.

Composition of the Vote Indiana Team

Todd Rokita, Chair
Indiana Secretary of State

Christa Adkins
Indiana Libertarian Party representative

Tami Barreto
League of Women Voters

Sen. Billie Breaux
Indiana Senate

Amos Brown
African-American community and media representative

Dick Dodge
Steuben County Commissioner and Association of Indiana Counties representative

Pam Finlayson
Allen County Election Administrator

Linda Grass
Hancock County Clerk

Dee Ann Hart
Disability community representative

Laura Herzog
Indiana Voter Registration Association

Suellen Jackson-Boner
Governor's Planning Council for People with Disabilities

Gen. Michael Kiefer
Military representative

J. Bradley King
Co-director, Indiana Election Division

Jon Laramore
Office of the Governor

Sally LaSota
Lake County Election Board Administrator

Rep. Ed Mahern
Indiana House of Representatives

Zach Main
Indiana Republican Party representative

Regina Moore
Indiana Voter Registration Association

Martha Padish
Vermillion County Clerk

Nick Rhoad
Disability community representative

Rep. Kathy Richardson
Indiana House of Representatives

Kristi Robertson
Co-director, Indiana Election Division

Col. Joe Ryan (Ret.)
Military representative

Doris Anne Sadler
Marion County Clerk

Sen. Becky Skillman
Indiana Senate

Joe Slash
Indianapolis Urban League

Patricia Wilson
Hispanic community representative

Robin Winston
Indiana Democratic Party representative

Facilitators: Sarah M. Taylor, former Marion County Clerk; Holly M. Davis; Anita L. Kolkmeier, General Counsel, Indiana Secretary of State's Office

This plan is respectfully submitted to the Election Assistance Commission, in accordance with Public Law 107-252, this 26th day of August, 2003.

Todd Rokita
Indiana Secretary of State

Items for Future Consideration

The Team put forth some additional ideas for future consideration following their charge for developing a blueprint for elections over the next five years.

(1) Department of Defense – "2nd generation voting"

This would require an amendment to the Constitution of Indiana to permit the children of overseas voters from Indiana, but who have never resided in Indiana themselves, to be eligible to register to vote upon meeting the requirements other than 30 days residence in Indiana.

(2) I.C. 3-11-8-3 flexibility of polling place relocation in rural counties.

(3) I.C. 3-6-6-13 majority vote of county election board to fill vacancies on precinct election boards.

(4) Although Public Law 209-2003 provides that lever voting machines and punch card voting systems may continue to be used in Indiana elections until December 31, 2005, the existing certifications for these systems should be revoked before that date so that no additional marketing of the systems can occur. To provide for more detailed scrutiny of applications for voting system certification, the General Assembly may wish to consider providing an up-to-four year term for certification, with all existing applications coming up for renewal during the off election year.

(5) Indiana Election Division explore future participation in Department of Defense project to permit military voters to cast ballots electronically through secured web based sites.

APPENDIX 1

INDIANA ELECTION REFORM HISTORY

The development and issuance of Indiana's plan to implement the Help America Vote Act of 2002 marks a significant moment in our state's history of election administration.

While the formation of the State Plan required the members of the Vote Indiana Team to look ahead to determine the wisest way to use our state's resources to bring about election reform in the years ahead, it also provides an opportunity to look back at Indiana's past efforts to ensure fair, honest, and accurate elections.

This look at our past tells us that many issues addressed in the HAVA Plan have been the focus of efforts to improve elections in Indiana

since the earliest days of our state. In fact, the first elections were held in what is now Indiana in December 1798, well before statehood.

The voters in the Northwest Territory created by the Continental Congress in 1787, only won the right to elect legislative representatives after a dozen years of effort, and not without obstacles and opposition. When the election was finally permitted, the franchise was limited to free males who were at least 21 years of age. The polling places were literally few and far between in the vast expanse of the territory. Voters in what is now Indiana could choose between traveling by river or wilderness trail to Vincennes, Detroit, and a couple of locations near Cincinnati to cast their ballot. Voting was *viva voce* ('by voice"), meaning that the voter recited the names of the candidates he wished to vote for before an election board, which wrote them down.

When Indiana attained statehood in 1816, election reform was a topic at the first Constitutional Convention. In a compromise, *viva voce* voting was eliminated, but the General Assembly retained the option to return to that method if it chose to do so. Instead, the emerging political parties began to provide the voters with "tickets" that listed their candidates. These tickets varied in size and color, so the ballot was still not secret.

When Indiana adopted its present Constitution on November 1, 1851, many of the current features of our election system began to take shape. Voting was now organized by counties within precincts. However, in almost all cases, the "precinct" consisted of an entire township, and there was no voter registration system. Elections were held on uniform dates (the second Tuesday in October for general elections, other than the November presidential elections), but there was no opportunity to cast an absentee ballot. A circuit court clerk was elected with responsibilities for county election administration.

During the Civil War era and the remainder of the 19th Century, the increasing growth of cities and other changes in society brought attention to the inadequacies in Indiana's election system. The absentee ballot process began as an opportunity to permit military voters to fully participate in elections, without being called away from their post of duty. The growing presence of a non-English speaking group of immigrants in Indiana led to the official publication of laws and other documents in their native language to educate the new German-speaking Hoosiers about the voting process.

Multiple voting by "repeaters" or "floaters" led to the adoption of a constitutional amendment requiring voter registration in Indiana in 1881. The franchise was expanded following the Civil War to include all adult males, regardless of race or color, repealing a ban on voting by African-Americans that had been enacted in Indiana in 1816.

However, the catalyst for sweeping election reform in Indiana was the controversial and disputed presidential election of 1888. Following charges of widespread election fraud in Indiana, Governor Isaac Gray initiated a bipartisan effort to restore public confidence in the integrity of the election process.

In 1889, the Indiana General Assembly enacted sweeping election reform legislation that became a model for other states. Indiana was the second state in the nation to require that voters be provided with government-issued, standardized secret ballots to replace the political party tickets. To safeguard the election process, bipartisan representation was required on all election boards, from the precinct level, to the county level, and in the newly created State Board of Election Commissioners. Counties were required to divide larger townships into multiple precincts to provide more accessibility to voters.

During the early years of the 20th Century, Indiana continued to refine and expand its election reform efforts. The franchise was expanded by constitutional amendment throughout the nation to include adult women. However, Indiana continued to be noted for its willingness to try innovative methods to improve the election process. Indiana embraced the new technology of lever machines after President McKinley signed a law in 1899 permitting their use in federal elections. In 1917, before the 19th Amendment to the U.S. Constitution was ratified, Indiana became one of the first eight states in the nation to pass legislation permitting women to vote in presidential elections. From 1915 until 1917, Indiana was (and so far remains) the only state to provide an "instant runoff" or preferential voting procedure in federal and state elections.

Despite this tradition of innovative reform, Indiana's election laws failed to keep pace with the sweeping changes of the 1930's and early 1940's. However, in 1945, at the urging of State Representative Edwin Steers, the Indiana General Assembly recognized the need to ensure the consistent and fair application of election statutes throughout the state, and adopted a comprehensive recodification of state election laws.

During the post-World War II period, Indiana election procedures continued to adapt to changes coming from the national level, including the expansion of the franchise to 18-year-old citizens and the elimination of lengthy residence requirements for voter registration. Likewise, Indiana continued to embrace new technology for voting, such as the punch card voting systems introduced

in the 1970's. However, Indiana's very decentralized election administration system led to both a new national controversy and the incentive for renewed election reform.

Following the disputed 8th Congressional District election in 1984, national attention was focused on the lack of a uniform process for conducting multi-county recounts in Indiana. Under the law of that time, each county conducted its own recount for the congressional election. After congressional hearings documented that the counties within the 8th District lacked consistent standards for counting votes, the Indiana General Assembly acted.

In 1986, the legislature began by enacting a new codification of Indiana election laws to better organize these statutes after forty years of amendments, and to repeal obsolete procedures. The State Recount Commission was created, and after conducting its first congressional recount in December 1986, recommended the adoption of legislation that established detailed and precise standards for counting punch cards and other types of ballots.

In 1987, the General Assembly continued its election reform efforts by enacting the recommendations of the Recount Commission as a part of one of the most comprehensive revisions in Indiana election law (Senate Enrolled Act 587). This 530-section statute authorized and expanded the use of new technologies such as direct recording electronic voting systems and optical scan ballot cards in Indiana elections, along with expanding county flexibility in locating polling places for access by voters with disabilities.

During the next dozen years, Indiana enacted several laws (and in 1998, a state constitutional amendment) to respond to new challenges in election administration. These measures included the protection of the voting rights of military voters and voters who moved during the final 30 days before an election, and the repeal of obsolete constitutional provisions, such as permitting township elections to be held in October. In response to the National Voter Registration Act of 1993, Indiana's voter registration statutes were comprehensively revised in 1995. The Census Data Advisory Committee was created as a permanent, standing body of the legislature to review and recommend changes to Indiana election laws. As a result of this Committee's work, significant election reform legislation was enacted in 1995, 1997, 1999, and 2003.

The 2003 legislative session also witnessed the enactment of Senate Enrolled Act 268, another comprehensive effort at election reform focused on the implementation of the Help America Vote Act in Indiana.

As a result of this rich heritage, Indiana stood in an enviable position to continue election reform in response to the 2000 general election and the enactment of the Help America Vote Act of 2002. It is hoped that the work of the members of the Bipartisan Task Force in 2001, and the Vote Indiana Team in 2003, the hundreds of county election administrators, and thousands of poll workers throughout the state will contribute to the success of the ongoing effort for election reform in Indiana.

Compiled and written by
J. Bradley King,
Co-Director, Indiana Election Division

APPENDIX 2

Indiana Bond Bank
Hoosier Equipment Lease Purchase (HELP) Program

Letter from the Chairman

To all potential participants:

The Primary mission of the Indiana Bond Bank is to assist local government in obtaining low-cost financing for their operations. To achieve our mission, the Bond Bank has developed several programs tailored to specific financing needs. The HELP program is one of these programs. Through the Hoosier Equipment Lease Purchase Program, local communities can acquire equipment at cash prices and utilize tax-exempt interest rates. Since its beginning in 1989, the program has assisted more than 135 communities in obtaining over $82 million in equipment. Interest rates for the program are based on the current U.S. Treasury Yield. According to a recent Internal Revenue Service Private Letter Ruling, small entities can also benefit from participation and still maintain their "small issuer" status. I encourage you to find out more about this standardized and streamlined lease-purchase program offered by the Indiana Bond Bank.

Sincerely,

Tim Berry
Chairman, Indiana Bond Bank
Treasurer, State of Indiana

Description of Program

- Assists communities in acquiring essential equipment through a standardized and streamlined lease-purchase process
- Standard lease term
- Minimum lease amount is $100,000
- Repayment flexibility; monthly, quarterly, semi-annually, or annually
- Eliminates the need to bid financing
- Rates are updated daily
- Over 135 communities assisted

Application Procedures

1. Complete one page application
2. Submit certain financial information
   Most recent audit report
   Current Budget
3. Approval process usually within seven business days
   Applications can be submitted at any time. Upon credit approval from the Bond Bank lender, only lease documentation is required to complete the transaction.

Lease Equipment

Computers	Voting Machines	Buses
Phone Systems	Cafeteria Equipment	Ambulances
911 Emergency Equipment/System	Maintenance Equipment	Garbage Trucks
Safety, Security and	Police Cars	Tandem Trucks
Surveillance Equipment	Fire Trucks	Sewer Vacs

For questions about eligible equipment, contact the Indiana Bond Bank at 317.233.0888 or 800.535.6974.
Information can also be found at www.in.gov/bond.