



# United States Department of the Interior



BUREAU OF INDIAN AFFAIRS  
Minnesota Agency  
Room 418, Federal Building  
522 Minnesota Avenue NW  
Bemidji, Minnesota 56601-3062

IN REPLY REFER TO:

Executive Direction

OCT 05 2000

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SHORT CRESSMAN & BURGESS, P.L.L.C.

Richard A. Du Bey  
SHORT CRESSMAN & BURGESS PLLC  
999 Third Avenue, Suite 3000  
Seattle, Washington 98104-4088

**Re: Leech Lake Hazardous Substances Control Ordinance**

Dear Mr. Du Bey:

We have received and reviewed the Leech Lake Hazardous Substances Control Ordinance and have determined that it meets the requirements of the federal statutes relative to Comprehensive Environmental Response. The approved Tribal Ordinance is enclosed.

A copy of the Ordinance will be provided to the Chairman, Leech Lake Reservation Tribal Council.

Sincerely,

  
Joel Smith  
SUPERINTENDENT

enclosure

cc: Eli Hunt, Chairman LLRTC w/enclosure



# Leech Lake Band of Ojibwe

*Eli O. Hunt, Chairman*  
*Linda G. Johnston, Secretary/Treasurer*

District I Representative  
*Peter D. White*

District II Representative  
*Lyman L. Losh*

District III Representative  
*Richard Robinson, Jr.*

## LEECH LAKE TRIBAL COUNCIL

### RESOLUTION NO. 01-29

#### RESOLUTION ADOPTING TRIBAL HAZARDOUS WASTE ORDINANCE

**WHEREAS**, Article I, Section 3 of the Revised Constitution and Bylaws of the Minnesota Chippewa Tribe, approved by the Assistant Secretary of the Interior on March 3, 1964, empowers the Tribe "to conserve and develop Tribal resources and to promote the conservation and development of individual Indian trust property, to promote the general welfare of the members of the Tribe; (and) to preserve and maintain justice for its members;" and

**WHEREAS**, Article III, Section 2 provides for the establishment of the Reservation Business Committee of the Leech Lake Band to serve as the governing body of the Leech Lake Reservation. The Reservation Business Committee is also known as the Reservation Tribal Council (hereafter "Tribal Council"); and

**WHEREAS**, the authority of the Tribal Council extends to the boundaries of the Leech Lake Reservation and the Territories ceded by the Treaties of 1837 and 1854 where hunting, fishing, ricing and gathering rights were reserved to the Leech Lake Band and its members; and

**WHEREAS**, the Tribal Council is aware that on September 21, 1984, the U.S. Environmental Protection Agency (EPA) designated the St. Regis/Wheeler Superfund Sites as one of the most polluted sites in the United States by placing it on the National Priority List (NPL) of hazardous waste sites because it presented a significant risk to human health and the environment; and

**WHEREAS**, the Division of Resource Management (DRM) has been investigating this NPL Superfund site, currently owned by International Paper as the successor in interest to Champion International and has advised the Tribal Council that past and ongoing releases of hazardous substances from the Champion NPL Site may present a substantial risk to the health of persons residing and doing business on the Leech Lake Reservation (Reservation population) and that such releases of hazardous waste may also present a substantial risk to the quality of the land, waters and resources of the Leech

Lake Reservation (Reservation Environment); and

**WHEREAS,** the Tribal Council did previously direct the DRM to enter into negotiations with EPA and to use best efforts to present the Tribal Council with a fully negotiated Superfund Agreement that provides funding to the Band, establishes the legal framework for an ongoing government-to-government relationship between EPA and the Band, and recognizes the inherent sovereignty of the Band to protect the health of the Reservation Population and the quality of the Reservation Environment; and

**WHEREAS,** on April 8, 1999 at a special meeting, the Tribal council adopted Resolution No. 99-81 which delegated certain authority to specific Tribal Officers and staff for the purpose of executing and implementing the Superfund Agreement; and

**WHEREAS,** the authorized Tribal officers and staff did thereafter execute, and are presently implementing, a Superfund Agency Cooperative Agreement; and

**WHEREAS,** the Tribal Council has been advised by DRM that an environmental emergency exists as a result of the past and continuing release of hazardous substances from the Champion NPL site, and that there may well be other sites that pose a similar threat to the quality of the reservation Environment; and

**WHEREAS,** the DRM has further advised the Tribal Council that it is necessary for the Leech Lake Band to exercise its sovereign power to adopt hazardous waste clean-up standards that will be protective of the Reservation Population and the Environment; and

**WHEREAS,** the Tribal Attorney and Special Environmental Counsel concur with DRM and have advised the Tribal Council that the Council possesses the inherent governmental authority to enact such Tribal laws as may be necessary to address this environmental emergency and may exercise its sovereign authority to protect the health and welfare of the Reservation Population and "to conserve and develop Tribal resources and to promote the conservation and development of individual Indian trust property, to promote the general welfare of the members of the Tribe; (and) to preserve and maintain justice for its members.

**NOW, THEREFORE, BE IT RESOLVED,** that the Tribal Council finds that an environmental emergency exists and that a Tribal Hazardous Waste Ordinance must be Adopted, which contains hazardous waste clean-up standards that are sufficiently stringent to protect the health of the Reservation Population and the quality of the Reservation Environment, and that this Ordinance shall be remedial in nature, so that it may address past actions that are causing present violations of this law, and that this

Ordinance shall come into force and effect immediately upon its enactment by the Tribal Council; and

**NOW, THEREFORE, BE IT RESOLVED**, that the Tribal Council finds that a Tribal Hazardous Waste Ordinance will only adequately protect the health of the Reservation Population and the quality of the Reservation Environment if it applies with equal force to Tribal members and non-members, and addresses present releases of hazardous substances in addition to past releases of hazardous substances that continue to pose a substantial risk to human health and the quality of the land, waters and resources of the Leech Lake Reservation; and

**BE IT FINALLY RESOLVED** that the Chairman of the Tribal Council is authorized to take such further action as may be necessary to implement this Resolution.

#### CERTIFICATION

**WE DO HEREBY CERTIFY** that the foregoing Resolution was duly presented and acted upon by a vote of 4 for 0 against and 0 silent a Special Meeting of the Leech Lake Tribal Council, a quorum being present, held on August 25, 2000.

*Eli O. Hunt*

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Eli O. Hunt, Chairman  
LEECH LAKE TRIBAL COUNCIL

*Linda G. Johnston*

\_\_\_\_\_  
Linda G. Johnston, Secretary/Treasurer  
LEECH LAKE TRIBAL COUNCIL

**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT**

**Sections**

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7. Hazardous waste account.
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**Section 1. Short title.**

This Act shall be known as the "Leech Lake Hazardous Substances Control Act."

**Section 2. Declaration of policy.**

(1) The beneficial stewardship of the land, air, and waters of the Leech Lake Reservation is a solemn obligation of the present generation for the benefit of future generations.

(2) The main purpose of this Act is to provide for the cleanup of hazardous substances sites and to prevent the creation of future hazards due to improper disposal of hazardous substances on or into the Reservation air, land, surface water and ground waters ("Reservation Environment").

(3) Each person either residing on or doing business within the exterior boundaries of the Leech Lake Reservation ("Reservation Population") benefits from a healthful environment and each person has a responsibility to preserve and protect the

quality of the Reservation Environment.

(4) The Tribe finds that an environmental emergency exists that warrants the exercise of Tribal authority and sovereignty to adopt this Act on an emergency basis so that it shall be enforceable immediately upon enactment, and that it shall immediately put into force and effect Tribal clean-up standards that are sufficiently protective of the Reservation Population and the Reservation Environment.

(5) The Tribe further finds that this Tribal Hazardous Waste Ordinance will only adequately protect the health of the Reservation Population and the quality of the Reservation Environment if it applies with equal force to Tribal members and non-members and is a remedial measure that is intended to address both future as well as past releases of hazardous substances that pose a substantial risk to human health and the quality of the land, waters and resources of the Leech Lake Reservation.

### **Section 3. Department of Resource Management's powers and duties.**

(1) The Department may exercise the following powers in addition to any other powers granted by Tribal or federal law:

(a) Investigate, provide for investigating, or require potentially liable persons to investigate any releases or threatened releases of hazardous substances, including but not limited to inspecting, sampling, or testing to determine the nature or extent of any release or threatened release. If there is a reasonable basis to believe that a release or threatened release of a hazardous substance may exist, the Department's authorized employees, agents, or contractors may enter upon any property and conduct investigations. The Department shall give reasonable notice before entering property unless an emergency prevents such notice. The Department may by subpoena require the attendance or testimony of witnesses and the production of documents or other information that the Department deems necessary;

(b) Conduct, provide for conducting, or require potentially liable persons to conduct remedial actions (including investigations under (a) of this subsection) to remedy releases or threatened releases of hazardous substances. In carrying out such powers, the Department's authorized employees, agents, or contractors may enter upon property. The Department shall give reasonable notice before entering property unless an emergency prevents such notice. In conducting, providing for, or requiring remedial action, the Department shall give preference to permanent solutions to the maximum extent practicable and shall provide for or require adequate monitoring to ensure the effectiveness of the remedial action;

(c) Retain contractors and consultants to assist the Department in carrying out investigations and remedial actions;

(d) Carry out all Tribal programs authorized under the federal cleanup law, the Resource Conservation and Recovery Act 42 U. S.C. § 6901 et seq., as amended, and other federal laws;

(e) Classify substances as hazardous substances for purposes of Section 15(10) of this Act;

(f) Issue orders or enter into consent decrees or agreed orders that include, or issue written opinions under (i) of this subsection that may be conditioned upon, deed restrictions or other appropriate institutional controls as may be necessary to protect human health and the environment from a release or threatened release of a hazardous substance from a facility. Prior to establishing a deed restriction or other appropriate institutional control under this subsection, the Department shall notify and seek comment from the Tribal Planning Department with jurisdiction over the real property subject to such restriction;

(g) Enforce the application of permanent and effective institutional controls that are necessary for a remedial action to be protective of human health and the environment;

(h) Require holders to conduct remedial actions necessary to abate an imminent or substantial endangerment pursuant to Section 15(15)(b)(ii)(C);

(i) Provide informal advice and assistance to persons regarding the administrative and technical requirements of this Act. This may include site-specific advice to persons who are conducting or otherwise interested in independent remedial actions. Any such advice or assistance shall be advisory only, and shall not be binding on the Department. As a part of providing this advice and assistance for independent remedial actions, the Department may prepare written opinions regarding whether the independent remedial actions or proposals for those actions meet the substantive requirements of this Act or whether the Department believes further remedial action is necessary at the facility. The Department may collect, from persons requesting advice and assistance, the costs incurred by the Department in providing such advice and assistance; however, the Department shall, where appropriate, waive collection of costs in order to provide an appropriate level of technical assistance in support of public participation. The Tribe, Department, and officers, agents, attorneys and employees of

the Tribe are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing, or failing to provide, informal advice and assistance; and

(j) Take any other actions necessary to carry out the provisions of this Act, including proposing that the Council amend this Act or adopt additional ordinances.

(2) The Department shall, to the best of its ability, implement all provisions of this Act, including the cleanup standards further described in Section 9 of this Act, and to the maximum extent practicable, institute investigative and remedial actions where appropriate; and the Department shall:

(a) Provide for public notice of investigative plans, clean up plans, or remedial plans and other significant actions taken under this act;

(b) Require the reporting by an owner or operator of releases of hazardous substances to the environment that may be a threat to human health or the environment within ninety days of discovery, including such exemptions from reporting as the Department deems appropriate, however this requirement shall not modify any existing requirements provided for under other laws;

(c) Establish reasonable deadlines for initiating an investigation of a hazardous waste site after the Department receives information that the site may pose a threat to human health or the environment and other reasonable deadlines for remedying releases or threatened releases at the site; and

(d) Enforce clean-up standards set forth in Section 9 of this Act, and;

(3) The Department may, as available resources permit, establish a program to identify potential hazardous waste sites and to encourage persons to provide information about hazardous waste sites.

#### **Section 4. Standard of liability-Settlement.**

(1) Except as provided in subsection (3) of this section, the following persons are liable with respect to a facility:

(a) The owner or operator of the facility;

(b) Any person who owned or operated the facility at the time of

disposal or release of the hazardous substances;

(c) Any person who owned or possessed a hazardous substance and who by contract, agreement, or otherwise arranged for disposal or treatment of the hazardous substance at the facility, or arranged with a transporter for transport for disposal or treatment of the hazardous substances at the facility, or otherwise generated hazardous wastes disposed of or treated at the facility;

(d) Any Person

(i) Who accepts or accepted any hazardous substance for transport to a disposal, treatment, or other facility selected by such person from which there is a release or a threatened release for which remedial action is required, unless such facility, at the time of disposal or treatment, could legally receive such substance; or

(ii) Who accepts a hazardous substance for transport to such a facility and has reasonable grounds to believe that such a facility is not operated in accordance with Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq., as amended, and programs appropriately delegated under RCRA; and

(e) Any person who both sells a hazardous substance and is responsible for written instructions for its use if

(i) The substance is used according to the instructions and

(ii) The use constitutes a release for which remedial action is required at the facility.

(2) Each person who is liable under this section is strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the releases or threatened releases of hazardous substances. The Department is empowered to recover all costs and damages from persons liable therefor.

(3) The following persons are not liable under this section:

(a) Any person who can establish that the release or threatened release of a hazardous substance for which the person would be otherwise responsible was caused solely by:

(i) An act of God;

(ii) An act of war; or  
(iii) An act or omission of a third party (including but not limited to a trespasser) other than

(A) An employee or agent of the person asserting the defense, or

(B) Any person whose act or omission occurs in connection with a contractual relationship existing, directly or indirectly, with the person asserting this defense to liability. This defense only applies where the person asserting the defense has exercised the utmost care with respect to the hazardous substance, the foreseeable acts or omissions of the third party, and the foreseeable consequences of those acts or omissions;

(b) Any person who is an owner, past owner, or purchaser of a facility and who can establish by a preponderance of the evidence that at the time the facility was acquired by the person, the person had no knowledge or reason to know that any hazardous substance, the release or threatened release of which has resulted in or contributed to the need for the remedial action, was released or disposed of on, in, or at the facility. This subsection (b) is limited as follows:

(i) To establish that a person had no reason to know, the person must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial or customary practice in an effort to minimize liability. Any court interpreting this subsection (b) shall take into account any specialized knowledge or experience on the part of the person, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection;

(ii) The defense contained in this subsection (b) is not available to any person who had actual knowledge of the release or threatened release of a hazardous substance when the person owned the real property and who subsequently transferred ownership of the property without first disclosing such knowledge to the transferee;

(iii) The defense contained in this subsection (b) is not available to any person who, by any act or omission, caused or contributed to the release or

threatened release of a hazardous substance at the facility;

(c) Any natural person who uses a hazardous substance lawfully and without negligence for any personal or domestic purpose in or near a dwelling or accessory structure when that person is:

(i) A resident of the dwelling;

(ii) A person who, without compensation, assists the resident in the use of the substance; or

(iii) A person who is employed by the resident but who is not an independent contractor;

(d) Any person who, for the purpose of growing food crops, applies pesticides or fertilizers without negligence and in accordance with all applicable Tribal and federal laws and regulations.

(4) There may be no settlement by the Department with any person potentially liable under this Act except in accordance with this subsection.

(a) The Department may agree to a settlement with any potentially liable person only if the Department finds that the proposed settlement would lead to a more expeditious cleanup of hazardous substances in compliance with cleanup standards under Section 3(2)(d) and with any remedial orders issued by the Department. Whenever practicable and in the public interest the Department may expedite such a settlement with a person whose contribution is insignificant in amount and toxicity.

(b) A settlement agreement under this subsection shall be entered as a consent decree issued by the Tribal Court.

(c) A settlement agreement may contain a covenant not to sue only of a scope commensurate with the settlement agreement in favor of any person with whom the Department has settled under this section. Any covenant not to sue shall contain a reopener clause which requires the Tribal Court to amend the covenant not to sue if factors not known at the time of entry of the settlement agreement are discovered and present a previously unknown threat to human health or the environment.

(d) A party who has resolved its liability to the Department under this subsection shall not be liable for claims for contribution regarding matters addressed in

the settlement. The settlement does not discharge any of the other liable parties but it reduces the total potential liability of the others to the Department by the amount of the settlement.

(e) If the Department has entered into a consent decree with an owner or operator under this section, the Department shall not enforce this Act against any owner or operator who is a successor in interest to the settling party unless under the terms of the consent decree the Department could enforce against the settling party, if:

(i) The successor owner or operator is liable with respect to the facility solely due to that person's ownership interest or operator status acquired as a successor in interest to the owner or operator with whom the Department has entered into a consent decree; and

(ii) The stay of enforcement under this subsection does not apply if the consent decree was based on circumstances unique to the settling party that do not exist with regard to the successor in interest, such as financial hardship. Such unique circumstances shall be specified in the consent decree.

(f) Any person who is not subject to enforcement by the Department under (e) of this subsection is not liable for claims for contribution regarding matters addressed in the settlement.

(5) In addition to the settlement authority provided under subsection (4) of this section, the Department may agree to a settlement with a person not currently liable for remedial action at a facility who proposes to purchase, redevelop, or reuse the facility, provided that:

(a) The settlement will yield substantial new resources to facilitate cleanup;

(b) The settlement will expedite remedial action consistent with this Act; and

(c) Based on available information, the Department determines that the redevelopment or reuse of the facility is not likely to contribute to the existing release or threatened release, interfere with remedial actions that may be needed at the site, or increase health risks to persons at or in the vicinity of the site.

(6) The Department does not have adequate resources to participate in all

property transactions involving contaminated property. The primary purpose of this subsection (5) is to promote the cleanup and reuse of vacant or abandoned commercial or industrial contaminated property. The Department may give priority to settlements that will provide a substantial public benefit, including, but not limited to the reuse of a vacant or abandoned manufacturing or industrial facility, or the development of a facility by a Tribal entity to address an important public purpose.

(7) Nothing in this Act affects or modifies in any way any person's right to seek or obtain relief under Tribal law, or other applicable laws, including but not limited to damages for injury or loss resulting from a release or threatened release of a hazardous substance. No settlement by the Department or remedial action ordered by the Tribal Court or the Department affects any person's right to obtain a remedy under Tribal law, or other applicable laws.

### **Section 5. Enforcement.**

(1) With respect to any release, or threatened release, for which the Department does not conduct or contract for conducting remedial action and for which the Department believes remedial action is in the public interest, the Director shall issue orders or agreed orders requiring potentially liable persons to provide the remedial action. Any liable person who refuses, without sufficient cause, to comply with an order or agreed order of the Director is liable in an action brought by the Department for:

(a) Up to three times the amount of any costs incurred by the Department as a result of the party's refusal to comply; and

(b) A civil penalty of up to twenty-five thousand dollars for each day the party refuses to comply.

The treble damages and civil penalty under this subsection apply to all recovery actions filed on or after the date this Act is enacted and adopted by the Department.

(2) The Department shall seek, by filing an action if necessary, to recover the amounts spent by the Department for investigative and remedial actions and orders, including amounts spent prior to the date this Act is enacted and adopted by the Department.

(3) The Department may request that the Office of Reservation Attorney bring an action to secure such relief as is necessary to protect human health and the environment under this Act.

(4) Civil actions under this section and Section 6 shall be brought in Tribal Court.

**Section 6. Judicial review.**

The Department's investigative and remedial decisions under Section 3 and Section 5 and its decisions regarding liable persons under Section 15(19) and Section 4 shall be reviewable exclusively in Tribal Court and only at the following times:

- (1) In a cost recovery suit under Section 5(2);
- (2) In a suit by the Department to enforce an order or an agreed order, or seek a civil penalty under this Act; and
- (3) In a suit by the Department to compel investigative or remedial action.

The court shall uphold the Department's action unless they were arbitrary and capricious.

**Section 7. Deposits to hazardous waste account.**

(1) There shall be established a hazardous waste account to be administered by the Department.

(2) The following moneys shall be deposited into the hazardous waste account:

- (a) the costs of remedial actions recovered under this Act;
- (b) penalties collected or recovered under this Act; and
- (c) any other money appropriated or transferred to the account by the Department. Moneys in the account may be used only to carry out the purposes of this Act including but not limited to the following activities:

(i) The hazardous waste cleanup program required under this Act;

(ii) Matching funds required under any federal law;

- (iii) Tribal programs for the safe reduction, recycling, or disposal of hazardous wastes from households, small businesses, and agriculture;
- (iv) Hazardous materials emergency response training; and
- (v) Water and environment health protection and monitoring programs;

(3) Moneys in the hazardous waste account may be spent only after approval of a budget by the Council. All earnings from investment of balances in the account shall be credited to the account.

**Section 8. Private right of action--Remedial action costs.**

(1) A person may bring a private right of action, including a claim for contribution or for declaratory relief against any other person liable under Section 4 for the recovery of remedial action costs, except that no private right of action may be brought against the following:

(a) The Tribe or instrumentalities of the Tribe (except where specified provided for by waiver of sovereign immunity); or

(b) As provided in Section 4(4)(d) and (f).

(2) Recovery shall be based on such equitable factors as the Tribal Court determines are appropriate. Natural resource damages paid to the Tribe under this Act may be recovered. Remedial action costs shall include reasonable attorneys' fees and expenses. Recovery of remedial action costs shall be limited to those remedial actions that, when evaluated as a whole, are the substantial equivalent of a Department-conducted or Department-supervised remedial action. Substantial equivalence shall be determined by the Tribal Court with reference to this Act. An action under this section may be brought after remedial action costs are incurred but must be brought within three years from the date remedial action confirms cleanup standards are met. The prevailing party in such an action shall recover its reasonable attorneys' fees and costs.

**Section 9. Remedial actions--Exemption from procedural requirements.**

(1) A person conducting a remedial action at a facility under a consent decree, order, or agreed order, and the Department when it conducts a remedial action, are exempt from the procedural requirements of all otherwise applicable Tribal laws. The Department shall ensure compliance with the substantive provisions of all otherwise

applicable Tribal laws. The Department shall establish procedures for ensuring that such remedial actions comply with the substantive requirements adopted pursuant to such laws. The procedures shall provide an opportunity for comment by the public and by the Tribal agencies that would otherwise implement the laws referenced in this section. Nothing in this section is intended to prohibit implementing agencies from charging a fee to the person conducting the remedial action to defray the costs of services rendered relating to the substantive requirements for the remedial action.

(2) An exemption in this section or in any other applicable Tribal law shall not apply if the Department determines that the exemption would result in loss of approval from a federal agency necessary for the Tribe to administer any federal law, including the federal resource conservation and recovery act; the federal Clean Water Act the federal Clean Air Act, and the federal Coastal Zone Management Act. Such a determination by the Department shall not affect the applicability of the exemptions to other statutes specified in this section.

## **Section 10. Cleanup standards.**

### **(1) Surface water, groundwater, and soil cleanup standards**

The cleanup standards enforced by the Department shall be the standards adopted by the Council as set forth in Appendix A, Appendix B, Appendix C and Appendix D to this Act or, if more stringent, the clean-up standards shall be those set forth in the comparable laws of the state of Minnesota (as revised) which by this reference shall be adopted into and made a part of the laws of the Tribe.

### **(2) Application of standards**

(a) The determination of "commercial" or "industrial" land use status shall be at the Department's discretion in consultation with the Tribal Planning Department. Commercial or industrial land use status shall not be granted in community wellhead protection zones as delineated by the Department nor shall it be granted in cases where in the opinion of the Department contamination from the site in question might be captured by a water source used for human consumption including but not limited to wells and springs.

(b) Background level will be determined by the Department based upon data and tests either obtained by the Department or presented to the Department by the site owner or operator.

(c) In cases involving multiple chemicals with multiple health effects the Department may either develop its own guidelines or use such comparable Minnesota law as it may choose to adopt as Tribal law to determine aggregate cleanup levels that are protective of human health and the environment. Such standards shall not come into force and effect until proposed to and adopted by the Tribal Council as Tribal law.

(d) The Department may consult with Tribal, state and federal agencies, institutes of higher learning, and other national or international entities with expertise in toxic cleanup and human or environmental toxicology in order to determine clean up levels which are protective of human health and the environment.

#### **Section 11. Sovereign immunity.**

Nothing in this Act shall be construed to constitute a waiver of the sovereign immunity of the Tribe, or of any instrumentality of the Tribe.

#### **Section 12. Captions.**

As used in this Act, captions constitute no part of the law.

#### **Section 13. Construction.**

The provisions of this Act are to be liberally construed to effectuate the policies and purposes of this Act. In the event of conflict between the provisions of this Act and any other act, the provisions of this Act shall govern.

#### **Section 14. Effective date.**

The effective date of this Act shall be the date this Act is enacted and adopted by the Council. This Act shall apply retroactively.

#### **Section 15. Severability.**

If any provision of this Act or its application to any person or circumstance is held invalid, the remainder of the Act or the application of the provision to other persons or circumstances is not affected.

#### **Section 16. Definitions.**

(1) "Attorney" or "Reservation Attorney" means the attorney authorized by

the Council to carry out the duties as described in the Act.

(2) **"Agreed order"** means an order issued by the Department under this Act with which the potentially liable person receiving the order agrees to comply. An agreed order may be used to require or approve any cleanup or other remedial actions, but it is not a settlement under Section 4(4) and shall not contain a covenant not to sue, or provide protection from claims for contribution.

(3) **"Council"** means the Tribal Council of the Leech Lake Band of Ojibwe.

(4) **"Department"** means the Division of Resource Management or DRM of the Leech Lake Band of Ojibwe.

(5) **"Facility"** means (a) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft, or (b) any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

(6) **"Federal cleanup law"** means the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et seq., as amended by Public Law 99-499.

(7) **"Foreclosure and its equivalents"** means purchase at a foreclosure sale, acquisition, or assignment of title in lieu of foreclosure, termination of a lease, or other repossession, acquisition of a right to title or possession, an agreement in satisfaction of the obligation, or any other comparable formal or informal manner, whether pursuant to law or under warranties, covenants, conditions, representations, or promises from the borrower, by which the holder acquires title to or possession of a facility securing a loan or other obligation.

(8) **"Hazardous substance"** means:

(a) Any **"dangerous waste,"** defined as any discarded, useless, unwanted, or abandoned substances disposed of in such quantity or concentration as to pose a present or potential hazard to human health, wildlife, or the environment because such wastes or constituents or combinations of such wastes:

(i) Have short-lived, toxic properties that may cause death,

injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(ii) Are corrosive, explosive, flammable, or may generate pressure throughout decomposition or other means.

(b) Any "**hazardous waste**," defined as any waste which

(i) will persist in a hazardous form for three years or more at a disposal site and which in its persistent form

(A) presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic makeup of people or wildlife,

(B) is toxic to people or wildlife

(C) adversely affects living organisms in soil, sediment, and water, or air;

(ii) if disposed of at a disposal site in such quantities or concentrations as might present a hazard to people or the environment.

(c) Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the characteristics of dangerous waste or extremely hazardous waste.

(d) Any substance that, on March 1, 1989, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C. § 9601(14);

(e) Petroleum or petroleum products; and

(f) Any substance or category of substances, including solid waste decomposition products, determined by the director to present a threat to human health or the environment if released into the environment.

The term "**hazardous substance**" does not include, any of the following when contained in an underground storage tank from which there is not a release: Crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal and Tribal laws.

(9) "**Hazardous waste account**" means an account of money set aside for uses described in Section 7.

(10) "**Holder**" means a person who holds indicia of ownership primarily to protect a security interest. A holder includes the initial holder such as the loan originator, any subsequent holder such as a successor-in-interest or subsequent purchaser of the security interest on the secondary market, a guarantor of an obligation, surety, or any other person who holds indicia of ownership primarily to protect a security interest, or a receiver, court-appointed trustee, or other person who acts on behalf or for the benefit of a holder. A holder can be a public or privately owned financial institution, receiver, conservator; loan guarantor, or other similar persons that loan money or guarantee repayment of a loan. Holders typically are banks or savings and loan institutions but may also include others such as insurance companies, pension funds, or private individuals that engage in loaning of money or credit.

(11) "**Independent remedial actions**" means remedial actions conducted without Department oversight or approval, and not under an order, agreed order, or consent decree.

(12) "**Indicia of ownership**" means evidence of a security interest, evidence of an interest in a security interest, or evidence of an interest in a facility securing a loan or other obligation, including any legal or equitable title to a facility acquired incident to foreclosure and its equivalents. Evidence of such interests includes, mortgages, deeds of trust, sellers interest in a real estate contract, liens, surety bonds, and guarantees of obligations, title held pursuant to a lease financing transaction in which the lessor does not select initially the leased facility, or legal or equitable title obtained pursuant to foreclosure and their equivalents. Evidence of such interests also includes assignments, pledges, or other rights to or other forms of encumbrance against the facility that are held primarily to protect a security interest.

(13) "**Operating a facility primarily to protect a security interest**" occurs when all of the following are met:

- (a) Operating the facility where the borrower has defaulted on the loan or otherwise breached the security agreement;
- (b) Operating the facility to preserve the value of the facility as an ongoing business;
- (c) The operation is being done in anticipation of a sale, transfer, or

assignment of the facility; and

(d) The operation is being done primarily to protect a security interest. Operating a facility for longer than one year prior to foreclosure or its equivalents shall be presumed to be operating the facility for other than to protect a security interest.

(14) **"Owner or operator"** means:

(a) Any person with any ownership interest in the facility or who exercises any control over the facility; or

(b) In the case of an abandoned facility, any person who had owned, or operated, or exercised control over the facility any time before its abandonment;

The term does not include:

(i) The Tribe or any tribal instrumentality which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the Council involuntarily acquires title. This exclusion does not apply to an instrumentality of the Tribe which is subject to a waiver of sovereign immunity, which has caused or contributed to the release or threatened release of a hazardous substance from the facility;

(ii) A person who, without participating in the management of a facility, holds indicia of ownership primarily to protect the person's security interest in the facility. Holders after foreclosure and its equivalent and holders who engage in any of the activities identified in subsection (15)(e) through (g) of this section shall not lose this exemption provided the holder complies with all of the following:

(A) The holder properly maintains the environmental compliance measures already in place at the facility;

(B) The holder complies with the reporting requirements in the rules adopted under this Act;

(C) The holder complies with any order issued to the holder by the Department to abate an imminent or substantial endangerment;

(D) The holder allows the Department or potentially liable persons under an order, agreed order, or settlement agreement under this Act access to

the facility to conduct remedial actions and does not impede the conduct of such remedial actions;

(E) Any remedial actions conducted by the holder are in compliance with any preexisting requirements identified by the Department, or, if the Department has not identified such requirements for the facility, the remedial actions are conducted consistent with the rules adopted under this Act; and

(F) The holder does not exacerbate an existing release. The exemption in this subsection (15)(b)(ii) does not apply to holders who cause or contribute to a new release or threatened release or who are otherwise liable under Section 4(1)(b), (c), (d), and (e); provided, however, that a holder shall not lose this exemption if it establishes that any such new release has been remediated according to the requirements of this Act and that any hazardous substances remaining at the facility after remediation of the new release are divisible from such new release;

(iii) A fiduciary in his, her, or its personal or individual capacity. This exemption does not preclude a claim against the assets of the estate or trust administered by the fiduciary or against a nonemployee agent or independent contractor retained by a fiduciary. This exemption also does not apply to the extent that a person is liable under this Act independently of the person's ownership as a fiduciary or for actions taken in a fiduciary capacity which cause or contribute to a new release or exacerbate an existing release of hazardous substances. This exemption applies provided that, to the extent of the fiduciary's powers granted by law or by the applicable governing instrument granting fiduciary powers, the fiduciary complies with all of the following:

(A) The fiduciary properly maintains the environmental compliance measures already in place at the facility;

(B) The fiduciary complies with the reporting requirements in the rules adopted under this Act;

(C) The fiduciary complies with any order issued to the fiduciary by the Department to abate an imminent or substantial endangerment;

(D) The fiduciary allows the Department or potentially liable persons under an order, agreed order, or settlement agreement under this Act access to the facility to conduct remedial actions and does not impede the conduct of such remedial actions;

(E) Any remedial actions conducted by the fiduciary are in compliance with any preexisting requirements identified by the Department, or, if the Department has not identified such requirements for the facility, the remedial actions are conducted consistent with the rules adopted under this Act; and

(F) The fiduciary does not exacerbate an existing release.

The exemption in this subsection (15)(b)(iii) does not apply to fiduciaries who cause or contribute to a new release or threatened release or who are otherwise liable under Section 4(l)(b), (c), (d), and (e); provided however, that a fiduciary shall not lose this exemption if it establishes that any such new release has been remediated according to the requirements of this Act and that any hazardous substances remaining at the facility after remediation of the new release are divisible from such new release. The exemption in this subsection (15)(b)(iii) also does not apply where the fiduciary's powers to comply with this subsection (15)(b)(iii) are limited by a governing instrument created with the objective purpose of avoiding liability under this Act or of avoiding compliance with this Act; or

(iv) Any person who has any ownership interest in, operates, or exercises control over real property where a hazardous substance has come to be located solely as a result of migration of the hazardous substance to the real property through the ground water from a source off the property, if:

(A) The person can demonstrate that the hazardous substance has not been used, placed, managed, or otherwise handled on the property in a manner likely to cause or contribute to a release of the hazardous substance that has migrated onto the property;

(B) The person has not caused or contributed to the release of the hazardous substance;

(C) The person does not engage in activities that damage or interfere with the operation of remedial actions installed on the person's property or engage in activities that result in exposure of humans or the environment to the contaminated ground water that has migrated onto the property;

(D) If requested, the person allows the Department potentially liable persons who are subject to an order, agreed order, or consent decree, and the authorized employees, agents, or contractors of each, access to the property to conduct remedial actions required by the Department. The person may attempt to

negotiate an access agreement before allowing access; and

(E) Legal withdrawal of groundwater does not disqualify a person from the exemption in this subsection (15)(b)(iv).

(15) **"Participation in management"** means exercising decision-making control over the borrower's operation of the facility, environmental compliance, or assuming or manifesting responsibility for the overall management of the enterprise encompassing the day-to-day decision making of the enterprise,

The term does not include any of the following:

(a) A holder with the mere capacity or ability to influence, or the **unexercised right to control facility operations;**

(b) A holder who conducts or requires a borrower to conduct an environmental audit or an environmental site assessment at the facility for which indicia of ownership is held;

(c) A holder who requires a borrower to come into compliance with any applicable laws or regulations at the facility for which indicia of ownership is held;

(d) A holder who requires a borrower to conduct remedial actions including setting minimum requirements, but does not otherwise control or manage the borrower's remedial actions or the scope of the borrower's remedial actions except to prepare a facility for sale, transfer, or assignment;

(e) A holder who engages in workout or policing activities primarily to protect the holder's security interest in the facility;

(f) A holder who prepares a facility for sale, transfer, or assignment or requires a borrower to prepare a facility for sale, transfer, or assignment;

(g) A holder who operates a facility primarily to protect a security interest or requires a borrower to continue to operate, a facility primarily to protect a security interest; and

(h) A prospective holder who, as a condition of becoming a holder, requires an owner or operator to conduct an environmental audit conduct an environmental site assessment, come into compliance with any applicable laws or

regulations, or conduct remedial actions prior to holding a security interest is not participating in the management of the facility.

(16) **"Person"** means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, state government agency, unit of local government, federal government agency or a Tribal instrumentality subject to a waiver of sovereign immunity.

(17) **"Policing activities"** means actions the holder takes to insure that the borrower complies with the terms of the loan or security interest or actions the holder takes or requires the borrower to take to maintain the value of the security. Policing activities include: Requiring the borrower to conduct remedial actions at the facility during the term of the security interest; requiring the borrower to comply or come into compliance with applicable federal, state, and local environmental and other laws, regulations, and permits during the term of the security interest; securing or exercising authority to monitor or inspect the facility including on-site inspections, or to monitor or inspect the borrower's business or financial condition during the term of the security interest; or taking other actions necessary to adequately police the loan or security interest such as requiring a borrower to comply with any warranties, covenants, conditions, representations, or promises from the borrower.

(18) **"Potentially liable person"** means any person whom the Department finds, based on credible evidence, to be liable under Section 4. The Department shall give notice to any such person and allow an opportunity for comment before making the finding, unless an emergency requires otherwise.

(19) **"Prepare a facility for sale, transfer, or assignment"** means to secure access to the facility; perform routine maintenance on the facility; remove inventory, equipment, or structures; properly maintain environmental compliance measures already in place at the facility; conduct remedial actions to clean up releases at the facility; or to perform other similar activities intended to preserve the value of the facility where the borrower has defaulted on the loan or otherwise breached the security agreement or after foreclosure and its equivalents and in anticipation of a pending sale, transfer, or assignment, primarily to protect the holder's security interest in the facility. A holder can prepare a facility for sale, transfer, or assignment for up to one year prior to foreclosure and its equivalents and still stay within the security interest exemption in subsection (15)(b)(ii) of this section.

(20) **"Primarily to protect a security interest"** means the indicia of ownership is held primarily for the purpose of securing payment or performance of an obligation.

The term does not include indicia of ownership held primarily for investment purposes nor indicia of ownership held primarily for purposes other than as protection for a security interest. A holder may have other, secondary reasons, for maintaining indicia of ownership, but the primary reason must be for protection of a security interest. Holding indicia of ownership after foreclosure or its equivalents for longer than five years shall be considered to be holding the indicia of ownership for purposes other than primarily to protect a security interest. For facilities that have been acquired through foreclosure or its equivalents prior to the date this Act is enacted and adopted by the Council, this five-year period shall begin as of the date of enactment and adoption.

(21) **“Public notice”** means, at a minimum, adequate notice mailed to all persons who have made timely request of the Department and to persons residing in the potentially affected vicinity of the proposed action; published in the Tribal Tribune; and opportunity for interested persons to comment.

(22) **“Reservation Environment”** means the environment within the exterior boundaries of the Leech Lake Reservation and other lands held in trust status by the U.S. Government for the Tribe or its members.

(23) **“Reservation Population”** means persons residing within the reservation environment.

(24) **“Release”** means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances.

(25) **“Remedy” or “remedial action”** means any action or expenditure consistent with the purpose of this Act to identify, eliminate, clean up, or minimize any threat of potential threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

(26) **“Tribe”** means the government of the Leech Lake Band of Ojibwe.

(27) **“Tribal Instrumentality”** means a unit of tribal government or a tribal organization that is ultimately responsible to the Leech Lake Business Council.

(28) **“Tribal Court”** shall mean the Tribal Court System of the Leech Lake

Band of Ojibwe.



**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT  
APPENDIX A**

**Ground Water Cleanup Levels**

The following chart indicates the minimum cleanup levels for ground water, in terms of amount of individual hazardous substance per unit volume, for the hazardous substances listed. These cleanup levels shall remain in effect until the Division of Resource Management ("Department") amends them. The Department may also establish more stringent cleanup levels for a specific site, when, based on a site-specific evaluation, the Department determines that such levels are necessary to protect human health and the environment.

<b>Hazardous Substance</b>	<b>CAS Number</b>	<b>Cleanup Level</b>
Acenaphthylene	208968	0.40 mg/l
Anthracene	120127	0.00002 mg/l
Arsenic, Total	7440382	0.01 mg/l
Benzene	71432	0.0002 mg/l
Benzo(a)Fluoranthene		3.0E-6 mg/l
Benzo(k)Fluoranthene		1.0E-6 mg/l
Benzo(g,h,i)Perylene	191242	0.2E-6 mg/l
Benzo(a)Pyrene	50328	1.0E-6 mg/l
Cadmium	7440439	0.0004 mg/l
Chromium, Total	7440473	0.001 mg/l
Chrysene	218019	2.0E-6 mg/l
Copper		0.015 mg/l
DDT/DDE/DDD (total)	50293	1.0E-5 mg/l
Dichlorophenol	120832	8.0E-5 mg/l
Ethylbenzene	100414	0.0002 mg/l
Flouranthene	206440	5.0E-6 mg/l
Indenol(1,2,3-C,D)Pyrene	193395	0.4E-6 mg/l
Lead	7439921	0.015 mg/l

Hazardous Substance	CAS Number	Cleanup Level
Mercury	7439976	5E-5 mg/l
Monochlorophenol	95578	0.00025 mg/l
Naphthalene	91203	0.0001 mg/l
PCBs (total)	1336363	1.0E-5 mg/l
PCDDs and PCDFs	1746016	3.0E-9 mg/l
Pentachlorophenol	87865	2.0E-5 mg/l
Phenanthrene	85018	3.0E-5 mg/l
Phenol	108952	0.0002 mg/l
Pyrene	129000	0.20 mg/l
Tetrachlorophenol	58902	1.0E-5 mg/l
Toluene	108883	0.0002 mg/l
Trichlorophenol	95954; 88062	2.5E-5 mg/l
Xylene	1330207	0.0002 mg/l

**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT  
APPENDIX B**

**Soil Cleanup Levels**

The following chart indicates the minimum cleanup levels for soil, in terms of amount of individual hazardous substance per unit mass, for the hazardous substances listed. These cleanup levels shall remain in effect until the Division of Resource Management ("Department") amends them. The Department may also establish more stringent cleanup levels for a specific site, when, based on a site-specific evaluation, the Department determines that such levels are necessary to protect human health and the environment.

Hazardous Substance	CAS Number	Cleanup Level
Arsenic, Total**	7440382	0.38 mg/kg
Benzene	71432	0.05 mg/kg
Benzo(a)Pyrene	50328	0.056 mg/kg
Cadmium	7440439	0.8 mg/kg
Chromium, Total	7440473	64 mg/kg
ChromiumVI		0.4 mg/kg
Copper		36 mg/kg
DDT/DDE/DDD (total)	50293	0.0025 mg/kg
Dibenz(ah)Anthracene	53703	0.056 mg/kg
Dichlorophenol	120832	0.003 mg/kg
Ethylbenzene	100414	0.05 mg/kg
Lead	7439921	70 mg/kg
Mercury	7439976	0.3 mg/kg
Methylphenol 2 (o-cresol)	95487	0.100 mg/kg
Methylphenol 4 (p-cresol)	106445	0.100 mg/kg
Monochlorophenol	95578	0.0025 mg/kg
PAHs (carcinogenic)+		0.1 mg/kg
PCBs (total)	1336363	0.20 mg/kg

<b>Hazardous Substance</b>	<b>CAS Number</b>	<b>Cleanup Level</b>
PCDDs and PCDFs	1746016	3.8E-6 or 1.0E-5 mg/kg*
Pentachlorophenol	87865	0.002 mg/kg
Phenol	108952	0.05 mg/kg
Tetrachlorophenol	58902	0.001 mg/kg
Toluene	108883	0.05 mg/kg
Trichlorophenol	95954; 88062	0.001 mg/kg
Xylene	1330207	0.05 mg/kg

**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT  
APPENDIX C**

**Sediment Cleanup Levels**

The following chart indicates the minimum cleanup levels for sediment, in terms of amount of individual hazardous substance per unit mass, for the hazardous substances listed. These cleanup levels shall remain in effect until the Division of Resource Management ("Department") amends them. The Department may also establish more stringent cleanup levels for a specific site, when, based on a site-specific evaluation, the Department determines that such levels are necessary to protect human health and the environment.

<b>Hazardous Substance</b>	<b>CAS Number</b>	<b>Cleanup Level</b>
Acenaphthene	83329	0.00671 mg/kg
Acenaphthylene	208968	0.00587 mg/kg
Anthracene	120127	0.0469 mg/kg
Arsenic, Total*+	7440382	5.9 mg/kg
Benz(a)Anthracene	56553	0.0317 mg/kg
Benzo(a)Pyrene	50328	0.0319 mg/kg
Cadmium	7440439	0.6 mg/kg
Chromium, Total	7440473	37.3 mg/kg
Chrysene	218019	0.0571 mg/kg
Copper		35.7 mg/kg
DDD+++	72548	0.00354 mg/kg
DDE+++	72559	0.00142 mg/kg
DDT+++	50293	0.00119 mg/kg
Dibenz(ah)Anthracene	53703	0.00622 mg/kg
Flouranthene	206440	0.111 mg/kg
Flourene	86737	0.0212 mg/kg
Lead	7439921	35.0 mg/kg
Mercury	7439976	0.17 mg/kg

Hazardous Substance	CAS Number	Cleanup Level
Methylphenol 2 (o-cresol)	95487	0.055 mg/kg
Methylphenol 4 (p-cresol)	106445	0.110 mg/kg
Naphthalene	91203	0.0346 mg/kg
PCBs (total)	1336363	0.023 mg/kg
PCBs Aroclor 1016		0.007 mg/kg
PCBs Aroclor 1260		0.005 mg/kg
PCDDs and PCDFs	1746016	1.0E-6 mg/kg
Pentachlorophenol	87865	0.360 mg/kg
Phenanthrene	85018	0.0419 mg/kg
Pyrene	129000	0.0530 mg/kg

**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT  
APPENDIX D**

**Surface Water Cleanup Levels**

The following chart indicates the minimum cleanup levels for surface water, in terms of amount of individual hazardous substance per unit volume, for the hazardous substances listed. These cleanup levels shall remain in effect until the Division of Resource Management ("Department") amends them. The Department may also establish more stringent cleanup levels for a specific site, when, based on a site-specific evaluation, the Department determines that such levels are necessary to protect human health and the environment.

<b>Hazardous Substance</b>	<b>CAS Number</b>	<b>Cleanup Level</b>
Acenaphthene	83329	0.012 mg/l
Acenaphthylene	208968	0.012 mg/l
Anthracene	120127	2.9E-5 mg/l
Arsenic, Total	7440382	0.053 mg/l
Arsenic V	7440382	0.0081 mg/l
Benzene	71432	0.70 mg/l
Benzo(a)Pyrene	50328	1.4E-5 mg/l
Cadmium	7440439	0.0011 mg/l
Chromium III	7440473	0.207 mg/l
Chromium VI	7440473	0.011 mg/l
Copper		0.012 mg/l
DDD	72548	6.0E-5 mg/l
DDE	72559	0.1 mg/l
DDT	50293	1.0E-6 mg/l
Dibenzofuran		0.020 mg/l
Dichlorophenol	120832	0.365 mg/l
Flouranthene	206440	0.020 mg/l
Flourene	86737	0.0039 mg/l

Hazardous Substance	CAS Number	Cleanup Level
Lead	7439921	0.0032 mg/l
Mercury	7439976	1.2E-5 mg/l
Naphthalene	91203	0.081 mg/l
PCBs (total)	1336363	1.4E-5 mg/l
PCDDs and PCDFs	1746016	1.0E-9 mg/l
Pentachlorophenol	87865	0.0055 mg/l (pH)
Phenanthrene	85018	0.0021 mg/l
Phenol	108952	2.56 mg/l
Trichlorophenol	95954; 88062	0.063; 0.970 mg/l

**LEECH LAKE BAND OF OJIBWE  
HAZARDOUS SUBSTANCES CONTROL ACT**

**FOOTNOTES AND REFERENCES TO APPENDICES A-D**

**Footnotes**

\* total congener concentration or toxic equivalency factor (TEQ); TEQ as per the World Health

Organization, 1997 (w)

+ except for individual PAHs listed below

\*\* all soil concentrations in dry weight (dw)

\*+ all sediment concentrations dw

++ sum of p,p' and o, p' isomers

(pH) hazardous substance concentration in the matrix is directly pH dependent

**References**

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USEPA, 1986. Quality Criteria for Water and updates: 1986a, 1986b, 1987. EPA 440/5-86-001.

USEPA, 2000. Browner, Carol: USEPA, Office of Research and Development, 2000

Information Sheet 1, Dioxin: Summary of the Dioxin Reassessment Science. June 12, 2000.

Van den Berg, M. et al., 1998. Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife. Environmental Health Perspective, 106 (12), 775-792.

Reviewed and approved for adoption as Tribal Law on this 3<sup>rd</sup> day of  
October, 2000 by the United States Department of the Interior,  
Bureau of Indian Affairs.

*Joel Smith*  
*Superintendent*  
*BIA - Minnesota Agency*

**LEECH LAKE BAND OF OJIBWE**  
**TRIBAL COUNCIL AGENDA ITEM REQUEST**

Date Submitted: 06/07/01 Meeting Date: 06/21/01

Division and Program: DRM - Environmental Program

Division Director Signature: J. P. Ryb 6-19-01

Subject: Adopting a Resolution

Executive Summary:  
(Interim Water Quality Standards)

**Type of Action:**

- RESOLUTION  
 INFORMATIONAL  
 APPROVAL  
 NO ACTION NECESSARY  
 OTHER (explain)

*In the event that the Division Director is unable to attend a delegate must be sent to the meeting.*

Date Received by Administration: \_\_\_\_\_

Deputy Director Signature: \_\_\_\_\_

Accounting Signature: \_\_\_\_\_  
(required on budget agenda items)

Council Action: approved June 21, 2001

Following each meeting Sharon Brown will return copies indicating action to:

Deputy Director	Date Sent:	<u>6/22/01</u>	
Division Director	Date Sent:	<u>6/22/01</u>	<u>Gerald W.</u>
Accounting (if required)	Date Sent:	<u>6/22/01</u>	<u>John E.</u>

5/22/01

Division Directors may reformat this form provided all of the information is included.



# Leech Lake Band of Ojibwe

*Eli O. Hunt, Chairman*

*Linda G. Johnston, Secretary/Treasurer*

District I Representative  
*Peter D. White*

District II Representative  
*Lyman L. Losh*

District III Representative  
*Richard Robinson, Jr.*

## LEECH LAKE TRIBAL COUNCIL

### RESOLUTION NO. 001 - 120

**RE:** Interim Tribal Water Quality Standards

**WHEREAS,** Article I, Section 3 of the Revised Constitution and the by-laws of the Minnesota Chippewa Tribe, approved by the Assistant Secretary of the Interior on March 3, 1964, empowers the Tribe “to conserve and develop Tribal resources and to promote the general welfare of the members of the Tribe; (and) to preserve and maintain justice for its members”, and

**WHEREAS,** Article III, Section 2, establishes the Tribal Council of the Leech Lake Band to serve as the governing body of the Leech Lake Reservation, and

**WHEREAS,** the Leech Lake Tribal Council has been advised by the Division of Resource Management (DRM) that the pollution of the waters under jurisdiction of the Leech Lake Band Constitutes a menace to public health and welfare, is harmful to wildlife, fish and aquatic life, and impairs domestic, agricultural, industrial, recreational, cultural, and other legitimate beneficial uses of water.

**WHEREAS,** the EPA has acknowledged its responsibility to Indian Tribes under federal environmental laws and its “Policy for the Administration of Environmental Programs on Indian Reservations” (1984), and in March 1994, EPA Administrator Carol Browner formally reaffirmed the 1984 EPA Indian Policy, which among other things, specifies that the EPA will: recognize Tribal Governments as primary parties for environmental issues on reservations; encourage and assist Tribes in assuming responsibility for reservation regulatory and program management and work directly with Tribes in the implementation of Tribal environmental programs.

**WHEREAS,** the Leech Lake Tribal Council finds that protecting, maintaining, and improving the quality of waters of the reservation for public water supplies, for the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, recreational, and other beneficial uses of water.



**WHEREAS,** the DRM has further advised the Leech Lake Tribal Council that it is necessary for the Leech Lake Band to exercise its sovereign power to adopt water quality standards that will be protective of the health and welfare of persons residing and doing business on the Leech Lake Reservation (Reservation Population) as well as the economic integrity of the Tribe and the quality of the land, waters and resources of the Leech Lake Reservation (Reservation Environment).

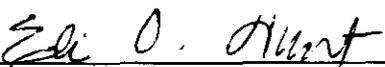
**WHEREAS,** the Reservation Attorney and Special Environmental Counsel concur with the DRM and have advised the Leech Lake Tribal Council that the Committee possesses the inherent governmental authority to enact such Tribal laws as may be necessary to address water pollution and may exercise its sovereign authority to protect the health and welfare of the Reservation Population and “to conserve and develop Tribal resources and to promote the conservation and development of individual Indian trust property, to promote the general welfare of the members of the Tribe; (and) to preserve and maintain justice for its members.”

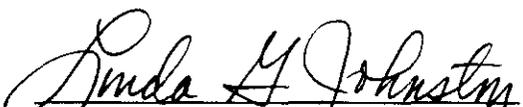
**NOW, THEREFORE, BE IT RESOLVED,** that the Leech Lake Tribal Council hereby adopts as a matter of Tribal law, certain Interim Tribal Water Quality Standards (TWQS) which shall be the same as the standards enumerated in the current Minnesota State Rules for Water, in particular, Minn. Rules Chapter 7050, for those classes of surface waters located within the exterior boundaries of the Reservation.

**BE IT FURTHER RESOLVED,** the Leech Lake Tribal Council finds that the Interim Water Quality Standards adopted by this Resolution as Tribal law to protect the health of the Reservation Population and the quality of the Reservation Environment, are hereby made effective immediately and are applicable with equal force and effect to all members of the Reservation populations, both members and non-members, whose acts or omissions may adversely affect the quality of the surface and groundwater which comprise the Reservation Environment.

**BE IT FINALLY RESOLVED** that the Chairman of the Leech Lake Band of Ojibwe is directed it take such further action as may be necessary to implement this Resolution.

**WE DO HEREBY CERTIFY,** that the foregoing Resolution was duly presented and adopted by of vote of 3 For 0 Against, and 0 Silent at a Special Meeting of the Leech Lake Tribal Council, a quorum being present, held on June 21<sup>st</sup>, 2001 at the Sugar Point Community Center -Sugar Point, Minnesota.

  
Eli O. Hunt, Chairman  
LEECH LAKE TRIBAL COUNCIL

  
Linda G. Johnston, Secretary/Treasurer  
LEECH LAKE TRIBAL COUNCIL

# Leech Lake Tribal Council



IN REPLY REFER TO:

## Leech Lake Tribal Council Ordinance No. 99-02

ELI O. HUNT,  
CHAIRMAN  
LINDA G. JOHNSTON,  
SECRETARY-TREASURER  
ALFRED FAIRBANKS, JR.,  
DISTRICT I REPRESENTATIVE  
JACK H. SEELYE,  
DISTRICT II REPRESENTATIVE  
MYRON F. ELLIS,  
DISTRICT III REPRESENTATIVE

### Regulation of Surface Use of a Portion of the Bowstring River

**Section 1**     **Intent and Purpose:** In order to preserve and protect the natural resources that lie within the jurisdictional boundaries of the Leech Lake Reservation, the Leech Lake Tribal Council hereby enacts and adopts this Ordinance regulating surface use of that portion of the Bowstring River that flows from Bowstring Lake to Sand Lake. The Bowstring River has long been a traditional wild rice harvesting place of the People of the Leech Lake Reservation. This Ordinance not only seeks to protect the rich wild rice beds of the Bowstring River, but to diminish, to the fullest extent possible, the erosion of the River's delicate shoreline, and to promote the safety of individuals who utilize the River.

**Section 2**     **Definitions:** For the purpose of this Ordinance, words and terms used hereafter shall have the following definition:

- 2.1     Reservation: Means the Leech Lake Indian Reservation as established by the Treaties of 1855, 1864 and 1867 and the Executive Orders of October 29 and November 4, 1873 and May 26, 1874 and described specifically in an unpublished judgment in Leech Lake v. Herbst, Nos. 3-69 Civ. 64 and 3-70 Civ. 228 (U.S. Dist. Ct., Dist. Of Minn., June 18, 1973).
- 2.2     Bowstring River: That body of water lying within the exterior boundaries of the Leech Lake Reservation which flows northward from Bowstring Lake to Sand Lake and beyond. For the purpose of this Ordinance, only that portion of the Bowstring River which lies between the outlet of Bowstring Lake to the inlet of Sand Lake will be subject to regulation.
- 2.3     Operate: The navigation of, or to otherwise use, a watercraft.
- 2.4     Watercraft: Any boat, pontoon, canoe, jet-ski or any other object that is used in the water and is operated by a person or individual.
- 2.4     Person or Individual: Any person, corporation, partnership or organization.

2.5 Slow no-wake: The operation of a watercraft at the slowest possible speed necessary to maintain steerage and in no case greater than 5 m.p.h.

**Section 3** Surface Regulation of the Bowstring River: For twenty-four (24) hours a day, from the beginning of Memorial Day weekend to the end of Labor Day weekend of each year, a slow no-wake speed zone will be in effect and will be enforced on that portion of Bowstring River which is the subject of this Ordinance.

**Section 4** Postings: Conservation Officers of the Leech Lake Reservation will post and maintain notices of the regulations governing the Bowstring River Slow No-Wake Restriction at all public watercraft accesses on the Bowstring River. In addition, the outlet on Bowstring Lake and the inlet on the Sand Lake will be delineated by buoys to mark the area under regulation.

**Section 5** Enforcement: The primary responsibility of enforcing this Ordinance will be vested in Leech Lake Reservation Conservation Officers. Other recognized officers authorized to enforce the terms of this Ordinance will be any officer of the Leech Lake Reservation Law Enforcement Department, the Itasca County Sheriff's department and Minnesota Department of Natural Resources Conservation Officers.

**Section 6** Exceptions: Any authorized Department of Resources Management Personnel, any recognized Emergency or Law Enforcement personnel, while in performance of their official duties, are exempt from the provisions of this ordinance.

**Section 7** Penalties: Any individual who violates the terms and intent of this Ordinance will be cited as "creating a wake in a slow no-wake zone" and will be ordered to appear before a judge of the Leech Lake Tribal Court or a court of competent jurisdiction. Fines may be imposed in Tribal Court which will not exceed \$250 per violation without a written order issued by a judge of the Leech Lake Court.

**Section 8** Effective Date: The terms and provisions of this Ordinance will be effective immediately upon its passage by the Leech Lake Reservation Tribal Council.

#### CERTIFICATION

I DO HEREBY CERTIFY, that the foregoing Ordinance was duly presented and adopted by a vote of 3 For, 0 Against and 0 Silent at a SPECIAL meeting of the Leech Lake Tribal Council, a quorum being present, held on JULY 10, 1998 at Cass Lake, Minnesota.

Eli O. Hunt  
Eli O. Hunt, Chairperson

Linda G. Johnston  
Linda G. Johnston, Secretary-Treasurer

**CERTIFICATION**

**WE DO HEREBY CERTIFY**, that the foregoing Ordinance was duly presented and adopted by a vote of 4 in favor, 0 opposed, and 0 abstaining, at a Special Meeting of the Leech Lake Tribal Council, a quorum being present, held on April 8, 1999, at Cass Lake, Minnesota.

*Eli O. Hunt*

Eli O. Hunt, Chairman  
LEECH LAKE TRIBAL COUNCIL

*Linda G. Johnston*

Linda G. Johnston, Secretary/Treasurer  
LEECH LAKE TRIBAL COUNCIL

REVISED DRAFT

May 30, 1991

CONSERVATION  
CODE  
OF THE  
LEECH LAKE BAND  
OF CHIPPEWA  
INDIANS

CHAPTER 1. IMPLEMENTING REGULATIONS.

SECTION 11.01. DEFINITIONS

As used in this Code, the following terms shall have the meanings given to them in this section:

(1) "Conservation Committee/Commission" shall mean an eight (8) member committee constituted as set forth in Section 12.01 which shall have authority and responsibility for regulation of all matters within the Leech Lake Reservation pertaining to hunting, trapping, fishing and the gathering of wild rice, and for the enforcement of such regulations as are herein included or as may be promulgated by the Committee.

(2) "Leech Lake Reservation" shall mean all lands and waters within the exterior boundary line described in the Memorandum of Settlement and Agreement entered into with the State of Minnesota and described in the Settlement Agreement between the Leech Lake Band of Chippewa Indians and the State of Minnesota in the Federal District Court case of **Leech Lake Band of Chippewa Indians -vs- Robert L. Herbst, et al.**

*(2-a) "Boundary Waters of the Leech Lake Reservation" shall mean those lakes, rivers and streams bisected by the exterior boundary of the Leech Lake Reservation, including the portions of which extend outside the exterior boundary line, and are identified herein:*

<i>NAME</i>	<i>COUNTY</i>	<i>TOWNSHIP</i>	<i>RANGE</i>
<i>Mississippi River</i>	<i>Cass/Itasca</i>	<i>144/145/55</i>	<i>25/26</i>
<i>Leech Lake River</i>	<i>Cass</i>	<i>143/144</i>	<i>26/27/28</i>
<i>Leech Lake</i>	<i>Cass</i>		
<i>Poy Lake</i>	<i>Cass</i>	<i>142</i>	<i>27/28</i>
<i>Roy River</i>	<i>Cass</i>	<i>141/142/143</i>	<i>27</i>
<i>Hazel Lake</i>	<i>Cass</i>	<i>141</i>	<i>29</i>
<i>Steamboat Lake</i>	<i>Cass/Hubbard</i>	<i>144</i>	<i>31/32</i>
<i>Mud Lake</i>	<i>Hubbard</i>	<i>145</i>	<i>32</i>
<i>Wolf Lake</i>	<i>Hubbard/Beltrami</i>	<i>145/146</i>	<i>32</i>

<i>Swenson Lake</i>	<i>Beltrami</i>	<i>146</i>	<i>32</i>
<i>Unnamed</i>	<i>Beltrami</i>	<i>146</i>	<i>32</i>
<i>Pimushe</i>	<i>Beltrami</i>	<i>147/148</i>	<i>30/31</i>
<i>Moose Lake</i>	<i>Beltrami</i>	<i>147</i>	<i>30</i>
<i>Third River</i>	<i>Itasca</i>	<i>147</i>	<i>29</i>
<i>Squaw Lake</i>	<i>Itasca</i>	<i>149</i>	<i>27</i>
<i>Rice Lake</i>	<i>Itasca</i>	<i>149</i>	<i>27</i>
<i>Little Whitefish Lake</i>	<i>Itasca</i>	<i>149</i>	<i>26</i>
<i>Four Town Lake</i>	<i>Itasca</i>	<i>148/149</i>	<i>25/26</i>
<i>Bowstring Lake</i>	<i>Itasca</i>	<i>147</i>	<i>25/26</i>
<i>Taylor Lake</i>	<i>Itasca</i>	<i>147</i>	<i>25</i>

(3) "*Leech Lake Tribal Council or Tribal Council* " shall mean the duly constituted governing body of the Leech Lake Band of Chippewa Indians.

(4) "Special Permit" shall mean a permit issued by the Conservation Committee exempting the recipient from one or more of the regulations contained herein upon a finding of the Committee that granting of the exemption will not endanger the resource.

(5) "Identification Card" shall mean an identification card issued by the Leech Lake Tribal Council which contains a full description, address and a color photograph of the recipient. Materials to be furnished by the State of Minnesota.

(6) "Band Fishing Permit" shall mean a permit issued by the Conservation Committee to a member of the Leech Lake Band of Chippewa Indians, which permit authorizes him to fish in accordance with the provisions of this Code.

(7) "Commercial Fishing Permit" shall mean a permit issued by the Conservation Committee to a member of the Leech Lake Band of Chippewa Indians.

(8) "Commercial Purpose" shall mean the taking or possession of wild animals or parts thereof for barter or sale.

(9) "Personal Use" shall mean the taking of wild game for any purpose other than commercial purposes.

(10) "Game Fish" shall include brook trout, brown trout, crappie, grayling, lake trout, large mouth bass, sauger, small mouth bass, sturgeon, sunfish, perch, walleye, muskellunge, northern pike, rainbow trout, rock bass, frogs and turtles.

(11) "Non-Game Fish" shall include buffalo fish, burbot, bullheads, carp, catfish, dogfish, gar, quillback, cisco, sheephead, suckers, tulibee, and whitefish.

(12) "Non-Band Fishing Permit" shall mean a permit issued by the Conservation Committee to an Indian who is not enrolled in the Leech Lake Band of Chippewa Indians, which permit authorizes him to fish in accordance with the provisions of this Code.

(13) "Band Hunting Permit" shall mean a permit issued by the Conservation Committee to a member of the Leech Lake Band of Chippewa Indians, which permit authorizes him to hunt and trap in accordance with the provisions of this Code.

(14) "Big Game" shall mean deer, bear, elk and moose.

(15) "Commercial Taking" shall mean the taking of any wild animal or its parts or flesh for the purpose of barter or sale of furs, pelts, hides or the flesh of such animals.

(16) "Fur Bearing Animals" shall mean beaver, mink, muskrat, otter, raccoon, fox, brush wolf, bobcat, lynx and weasel.

(17) "Migratory Birds" shall have the meaning set forth in the regulation promulgated pursuant to the Migratory Bird Treaty Act at 50 C.F.R., Part 10.

(18) "Motor Vehicles" shall mean self-propelled, motor driven vehicles.

(19) "Small Game" shall mean all wild animals and birds not defined as big game or fur bearing animals.

(20) "Non-Band Hunting Permit" shall mean a permit issued by the Conservation Committee to an Indian who is not enrolled in the Leech Lake Band of Chippewa Indians, which permit authorizes him to hunt and trap in accordance with the provisions of this code.

(21) "Taking - Hunting - Fishing" shall include pursuing, shooting, killing, capturing, trapping, snaring, angling, and netting wild animals and all lesser acts such as intentionally disturbing, harrying, worrying or placing, setting, drawing, using any net, trap or other device to take wild animals, and includes every attempt to take, every act of assistance to any other person in taking or attempting to take wild animals.

(22) "Transport - Transportation" shall mean carrying or moving by any instrumentality, attempting to do so, or accepting or receiving wild animals for transportation or shipment.

(24) "Wild Animals" shall mean all living creatures, not human, wild by nature, endowed with sensation and power of voluntary motion, and included quadrupeds, mammals, birds, fish, amphibious reptiles, crustaceans and mollusks.

(25) "Closed Season" shall mean the period during which protected wild animals may not be taken.

(26) "Open Season" shall mean the period during which protected wild animals may be taken.

(27) "Protected Wild Animals" shall include all wild animals which are accorded some measure of protection in the time or manner of taking.

(28) "Firearm" shall mean any gun from which shot or projectile is discharged by means of an explosive, gas or compressed air.

(29) "Band Ricing Permit" shall mean a permit issued by the Conservation Committee to a member of the Leech Lake Band of Chippewa Indians, which permit authorizes him to gather wild rice in accordance with the provisions of this Code.

(30) "Paddy Rice" shall mean that wild rice crop grown in artificially constructed paddies.

(31) "Non-Band Ricing Permit" shall mean a permit issued by the Conservation Committee to an Indian who is not enrolled in the Leech Lake Band of Chippewa Indians which permit authorizes him to gather wild rice in accordance with the provisions of this Code.

(32) "Wild Rice" shall mean that rice crop which grows naturally or as a result of reseeding in the natural lakes and waters, including lakes resulting from flood control structures, of the Leech Lake Reservation *and the boundary waters thereof.*

#### SECTION 12.01.

The Conservation Committee shall consist of eight persons, five of whom shall be the current members of the Leech Lake Tribal Council and these shall be the only voting members of the Conservation Committee. One person shall be appointed to the Conservation Committee by the Minnesota Agency Superintendent, Bureau of Indian Affairs; one person shall be appointed by the Regional Director, Region 3, U.S. Fish and Wildlife Service; and one person shall be appointed by the Commissioner of the Minnesota Department of Natural Resources; provided that these three persons shall serve the Conservation Committee in an advisory capacity, shall serve indefinite terms and may not vote.

#### SECTION 12.02.

The Conservation Committee shall perform all duties and responsibilities and shall exercise all authority delegated to it by the Leech Lake Tribal Council by this Ordinance, including, but no limited to:

(1) Issuance of Band Fishing Permits, Non-Band Fishing Permits, Commercial Fishing Permits, Band Hunting Permits, Non-Band Hunting Permits, Band Ricing Permits, Bait Harvesting or Rice Buyer's Permits or any other type of permit authorized by these regulations.

(2) Amendment of these regulations and adoption of additional regulations as found necessary.

(3) Setting of seasons where none are specifically provided, closing or shortening existing seasons when necessary for the preservation of the resources, or extending or opening seasons when it is determined that it will not harm the resource.

(4) Setting limits on manner or amount of taking any fish, game or wild rice, when necessary for the conservation of the resource and altering limits specifically provided by these regulations.

(5) Reviewing on an annual basis or more frequently the number of each type of permit outstanding, with particular emphasis on any Commercial Permits or Special Permits which may be outstanding, to determine whether or not it is in the best interest of conservation to continue such permits.

(6) Revoking of permits under the provisions of Section 13.01.

(7) Keeping and maintaining an up-to-date and accurate list of all persons to whom each type of permit has been issued.

(8) Maintaining liaison with the Department of Natural Resources to regulate and manage the game and fish resources between Indian and non-Indian.

SECTION 13.01.

The following offenses will be subject to penalties pursuant to Section 51.03, and any permit authorized by this Code may be revoked:

(1) Allowing another person to make use of a permit regardless of whether or not such person would qualify on his own to receive such a permit, *except a person may take big game animals on behalf of immediate family members ( mother, father, grandparents, spouse, children or legal dependent ), provided said person and the immediate family member both possess valid big game permits.*

(2) Taking, assisting in the taking, possession or transporting of any game prohibited in Section 32.01, or any game or fish which have been determined rare and endangered by **the Committee and State of Minnesota.**

(3) Wanton destruction or waste of the game, fish or wild rice of the Leech Lake Reservation.

(4) Exceeding established limits, using prohibited means or equipment, or fishing, hunting, trapping or ricing outside of established seasons.

(5) Hunting, fishing, trapping or ricing while under the influence of alcohol, drugs or narcotics.

(6) Fraud in the procurement of any permit.

(7) Carrying a loaded firearm, except a pistol on a snowmobile or other off-road vehicle while engaged in trapping during daylight hours only, in or on any moving vehicle.

(8) Hunting from a snowmobile or chasing game with a snowmobile.

(9) Hunting of wild animals by artificial lights except as otherwise specifically provided.

(10) Refusal to display the proper permit upon request of any member of the Conservation Committee, a Conservation Officer, a member of the Tribal Council, or any other person authorized by the Conservation Committee.

(11) Willful hinderance, resistance, obstruction or interference with the lawful duties of a Conservation Officer or Court personnel.

(12) Failure to stop for flashing red lights.

(13) The purchase or attempt to purchase protected wild animals or parts thereof unless otherwise provided within this Code.

*(14) The sale or barter or attempt to sell or barter protected wild animals or parts thereof unless otherwise provided within this Code.*

(15) Any other violation of this Code not enumerated above.

## CHAPTER II. FISHING REGULATIONS.

### SECTION 21.01.

Every member of the Leech Lake Band of Chippewa Indians who takes fish within the Leech Lake Reservation shall have in his or her possession a proper Band Fishing Permit. This permit must be in his or her possession whenever taking, possessing or transporting fish within the Reservation and whenever possessing transporting fish anywhere within the State of Minnesota, which fish were lawfully taken within the Reservation. *Persons under sixteen (16) years of age may take fish by means of angling and spearing, in accordance with the provisions of this Code, without a permit.*

### SECTION 21.02.

If the Conservation Committee determines that it is in the best interests of the Leech Lake Band of Chippewa Indians, it may issue a Non-Band Fishing Permit to (1) any other member of the Minnesota Chippewa Tribe not enrolled with the Leech Lake Band, (2) any other Indian who resides within the Leech Lake Reservation but is not enrolled with the Minnesota Chippewa Tribe, and (3) to any visiting Indian officials. Such a permit must be in the possession of any such person who takes fish within the Leech Lake Reservation or who transports or possesses fish lawfully taken on the Reservation any place within the State of Minnesota. *Persons under sixteen (16) years of age may take fish by means of angling or spearing, in accordance with the provisions of this Code, without a permit.*

SECTION 21.03.

Fees may be charged by the Conservation Commission for issuance of the permits. The Commission may in its discretion charge a greater fee for a Non-Band Permit than for a Band Fishing Permit.

SECTION 21.04.

No member of the Leech Lake Band of Chippewa Indians shall be required to purchase or possess a Minnesota Fishing License when fishing within the Leech Lake Reservation or when possessing or transporting fish, lawfully taken within the Reservation, anywhere within the State of Minnesota, provided that he has in his possession a proper Band Fishing Permit. Any Indian who is not enrolled in the Leech Lake Band shall not be required to purchase or possess a Minnesota Fishing License when fishing within the Leech Lake Reservation or when possessing or transporting fish, lawfully taken within the Reservation, anywhere within the State of Minnesota, provided that he has in his possession a proper Non-Band Fishing Permit. *Transportation of gamefish off the Reservation is subject to the provisions of Section 13.03 of this Code.*

SECTION 22.01.

The following regulations are hereby imposed on the taking for personal use of fish:

(1) No fish may be taken by means of explosives, drugs, poisons, lime medicated bait or other deleterious substances.

(2) There shall be no taking of game fish for any purpose by use of gill nets except where such taking is for personal use. *Snapping turtles may be taken for commercial purposes during the open season for game fish provided that any person taking snapping turtles for commercial purposes possesses a valid commercial fishing permit.*

(3) Game fish season shall be closed between March 31 and the ~~closest Saturday to~~ *May 15, two weeks prior to the Saturday of Memorial Day weekend*, except for perch and panfish. No gill nets shall be used during this period for the taking of any fish.

(4) No gill net shall be set in a river or stream or within three hundred (300) feet of the inlet or outlet of any river or stream between the opening of fishing and June 15 of each season, except exemptions may be made upon an individual application to the Reservation Tribal Council.

(5) Muskellunge shall not be taken with a spear.

(6) When netting for personal use, no more than 200 feet of net or nets shall be used by each permittee and no permittee may set a net within 50 feet of another's net or nets.

(7) Non-game fish, including suckers, shall not be taken in any manner between March 31 and April 30.

(8) No fishing shall be allowed in "No Fishing Areas" posted by the Leech Lake Conservation Commission.

(9) All nets must be identified as Indian by having a float attached to either or both ends with the permittee's name and permit number plainly marked on the float.

(10) It shall be unlawful to have in possession, at or near any waters, a spear during the period of April 1 through April 30. It shall be unlawful to have in possession, at or near any water, a gill net during the period of April 1 to the opening of the game fish season.

#### SECTION 22.02.

There shall be no taking of any species of fish determined rare or endangered **by the Committee and State of Minnesota**. The Conservation Committee may in its discretion close all or portions of specified lakes, *streams or rivers to all or specific methods of* fishing if it determines that further fishing in such lakes, *streams or rivers* will harm the resource, or may close such lakes, *streams or rivers* to fishing for specified species of fish when it determines that such species will be endangered by further taking.

#### SECTION 23.01.

Fish may not be taken for commercial purposes within the Leech Lake Reservation; provided, that upon proper application by a Band member only, the Conservation Committee may in its discretion issue a Commercial Fishing Permit for **non-game fish species** only upon determination that limited amount of commercial fishing will not harm the resource. The Conservation Committee shall strictly regulate the manner of fishing, the type of fish taken and the amount of the take under such a permit. A person operating under such a permit shall have in possession at all times a Commercial Fishing Permit . All nets used must be identified as Indian nets by having a float attached to either or both ends, with the permittee's name and *Commercial Fishing* permit number plainly marked on the float.

#### SECTION 23.02

Band Members shall not exercise personal netting privileges when engaging in commercial netting activities.

#### SECTION 23.03.

All persons operating under a Commercial Fishing Permit shall be subject to the following regulations regarding the taking and transportation of non-game fish.

(1) All non-game fish taken under a valid Commercial Fishing Permit may be possessed in quantities prescribed in such permit and bought, sold or transported during any season designated by the Conservation Committee. Such fish may be frozen or cured during open season, and when so cured or frozen may be transported, bought or sold at any time.

(2) All live game fish taken incidentally in a commercial fishing operation shall be released immediately to the waters from which taken. All dead or injured game fish may be retained for personal use.

(3) When shipping non-game fish taken under a Commercial Fishing Permit, the parcel must be plainly marked on the outside stating the name, address and permit number of the shipper and the kind and number of such fish contained in the package. The waybill or receipt issued by any common carrier to a shipper shall specify the pounds and species of such fish so shipped.

(4) No more than ~~two 300-foot nets~~ *600 linear feet of net in total with no single net being more than 300' in length* may be used for the commercial taking of non-game fish by a single permittee.

(5) The season and other conditions for the commercial taking of non-game fish will be set annually by the Leech Lake Tribal Council.

(6) Commercial taking of minnows and other baits except for re-sale at resorts or bait shops located within the Reservation boundaries is prohibited *except by special permit or* for those who have entered into contracts with the Leech Lake Tribal Council for the commercial taking of minnows and other baits.

*(7) Every person who takes minnows or leeches within the Leech Lake Reservation shall have in his/her possession a Commercial Bait Harvest Permit, which permit must be current and must not have been revoked.*

*(8) Nets and traps used to take leeches or minnows must be clearly identified and visible above the surface of the water, with the owners name and license number on one end of the net or trap on a float, flag or pole.*

*(9) Nets or traps may not be placed within 100 feet of previously set nets or traps of another permittee.*

*(10) It shall be prohibited to tend or disturb the net or trap of any other permittee without written authorization from the first permittee.*

*(11) Nets or traps used for fish, leeches or minnows shall be removed from the water body and adjacent shoreline when not in active use. Nets or traps must be tended within 72 hours of being set or previously tended.*

*(12) Wanton waste of leeches or minnows shall be prohibited.*

*(13) Any duly authorized Conservation Officer of the Leech Lake Reservation or the Director of the Leech Lake Reservation Division of Resources Management, may, at their discretion, close a given body of water to bait taking to prevent overharvest, environmental damage or to keep the peace.*

SECTION 23.03.

All dark houses will be identified with a name, address and permit number posted in a conspicuous place and manner. All dark houses will be removed from the ice of the lakes and streams and waters within the Reservation not later than 12:01 a.m. March 1st of each year.

### CHAPTER III. HUNTING AND TRAPPING REGULATIONS.

#### SECTION 31.01.

Every member of the Leech Lake Band of Chippewa Indians who hunts or traps within the Leech Lake Reservation must have in his or her possession a proper Band Hunting Permit. This permit must be in his or her possession at all times when hunting, trapping or taking within the Reservation any small game, big game or fur bearing animals, or when possessing or transporting any place in the State of Minnesota any small game, big game or fur bearing animal lawfully taken within the Reservation. *Band Members under sixteen (16) years of age may take small game in accordance with the provisions of this Code without a permit.*

#### SECTION 31.02.

If the Conservation Committee determines that it is in the best interest of the Leech Lake Band of Chippewa Indians, it may issue a Non-Band Hunting Permit to (1) any member of the Minnesota Chippewa Tribe not enrolled with the Leech Lake Band, (2) any other Indian who resides within the Leech Lake Reservation but is not enrolled with the Minnesota Chippewa Tribe, and (3) to any visiting Indian officials. Such a permit must be in possession of any such person who takes big game, small game or traps within the Leech Lake Reservation or who transport or possesses big game, small game or furs lawfully taken on the Reservation any place within the State of Minnesota. *Non-Band Members under sixteen (16) years of age may take small game in accordance with this Ordinance without a permit.*

### SECTION 31.03.

Fees may be charged at the discretion of the Conservation Committee for the issuance of permits required under Section 31.01 and 31.02. The Conservation Committee may charge a higher fee for the issuance of a Non-Band Hunting Permit than for a Band Hunting Permit.

### SECTION 31.04.

This section shall not be construed to permit the entry for hunting or trapping of game on privately owned land without permission of the owner thereof, provided by Minnesota Statute 100.273 and 100.29 (subd. 21) as enacted at the time of the Settlement Agreement in 1973.

### SECTION 32.01.

(1) There shall be no taking, possession, or transportation whatsoever of bald eagle, fisher, golden eagle, marten, timberwolf or any species determined to be rare or endangered by the Committee and State of Minnesota; however, the Reservation Business Committee may authorize a fisher or martin trapping season if the State of Minnesota authorizes such trapping season for non-Indians.

(2) No protected wild animal shall be captured or trapped and kept for a pet or for sale unless a special permit for such purpose has been issued by the Conservation Committee.

(3) All weapons carried on or in a self-propelled motor vehicle shall be kept completely cased during the period from one-half hour after sunset until one-half hour before sunrise, unless the weapon is in the trunk of a motor vehicle.

**SECTION 32.02. ~~SMALL GAME SEASONS AND LIMITS. RULES AND REGULATIONS~~**

(1) The small game season shall be ~~September 1 to and including March 1.~~*set annually by the Conservation Committee.*

(2) There shall be no limitation as to the season, number or manner of taking of rabbit or squirrel.

(3) The taking of migratory birds shall be subject to the provisions of the Migratory Bird Treaty Act, 16 U.S.C. 703-711 and regulations promulgated pursuant thereto set forth at 50 C.F.R., Pat 10.

(4) The taking of ruffed grouse, sharp-tailed grouse and spruce hen shall be limited to six (6) per day per person, and the possession and transportation of these types of small game shall be limited to twelve (12) at any time.

**SECTION 32.03. BIG GAME RULES AND REGULATIONS.**

(1) The taking of deer and bear shall be limited to one (1) each per season, provided that a Special Permit may be issued allowing the taking of one(1) additional deer upon a showing that a greater need for sustenance exists. A Special Permit is to be returned to the

Committee after use. The season shall be within the period of September 1 to January 31, inclusive. Each permittee shall be furnished with locking seals paid for by the State of Minnesota. The seal shall be affixed to the deer between the tendon and bone and around the bone of the leg or affixed to the bear through an ear so that such seal cannot be removed without breaking the lock. The seal shall be affixed before transporting the animal in any manner or taking it to your place of abode. Such seal must remain on the animal during all phases of possession and transportation and until the animal is butchered or processed.

(2) The taking of elk and moose shall not be permitted; however, the Conservation Committee may authorize a moose or elk season if the State of Minnesota authorizes an elk or moose season for non-Indians.

(3) Set guns, swivel guns and dogs shall not be used for the taking of big game animals.

#### SECTION 32.04. TRAPPING RULES AND REGULATIONS.

(1) The season for the trapping of fur bearing animals *not subject to the restrictions set forth in Chapter 1, Section 13.01 (2)* shall be ~~October 1 to March 31, inclusive~~ *set annually by the Conservation Committee.*

~~Beaver—October 1 to April 30~~

~~Fisher—December 1 to January 30~~

~~All other fur bearing species not subject to the restrictions set forth in Chapter 1, Section 13.01 (2).~~

~~Amended: LLRBC Resolution #87-80~~

~~Date: June 11, 1987~~

~~(1) The season for the trapping of fur bearing animals shall be October 1 to April 30, inclusive.~~

(2) All fur bearing animals taken pursuant to these regulations and all traps used pursuant to these regulations shall bear the *permittee's name and address or the* identification number of the permittee's Band Hunting permit or Non-Band Hunting Permit.

(3) When shipping furs taken under a Band or Non-Band Hunting Permit, the parcel must be plainly marked on the outside stating the name, address and permit number of the shipper and kind and number of skins contained in the package. The waybill or receipt issued by any common carrier to a shipper shall specify the number and species of furs so shipped.

(4) Hides or pelts adapted to personal use need not carry the permit number of the taker once one adaption is completed.

(5) It shall be unlawful to disturb beaver dens or houses. Muskrat houses, if opened, shall be returned as near as practicable to their natural condition.

(6) The taking of fisher shall be limited to three (3) animals per season by a single permittee.

#### SECTION 32.05.

There shall be no commercial taking of big game, small game or fur bearing animals with the following exceptions, for which no special commercial permit is needed other than the Band Hunting Permit or Non-Band Hunting Permit:

(1) The skins of all fur bearing animals may be taken commercially according to the regulations of Section 32.04 above.

(2) The hides of deer may be possessed and transported for commercial purposes and when transported or shipped the taker must comply with the regulations set forth at Section 32.04 (3) above if otherwise lawfully taken.

(3) The flesh of beaver, muskrat, rabbit and raccoon may be taken for commercial purposes, and when the flesh of these animals is transported or shipped, the taker must comply with the regulations set forth as Section 32.04 (3) above. The flesh of animals enumerated herein, except that of muskrat, may not be transported outside of the State of Minnesota.

#### SECTION 32.06.

There shall be no taking of any wild animal from moving motor vehicles, including snowmobiles. There shall be no taking of wild animals with the use of artificial lights except for raccoon which have been treed by a dog. There shall be no hunting within 500 feet of any public campground during the season within which it is open for public use, or within

500 feet of any occupied dwelling. There shall be no firing *from*, down or across any *maintained highway or improved graveled* public road while hunting big game.

#### SECTION 32.07.

The Conservation Commission may shorten the season provided by these regulations, may impose restrictions where none are set forth, or may close and prohibit trapping or hunting of specified species of small game, big game or fur bearing animals, when it determines that such acts are in the best interests of the resources. The Conservation Committee may also impose such other restrictions on manner of taking and bag limits as it deems necessary for preservation of the resource.

#### SECTION 32.08.

~~All persons under 12 years of age must possess a valid Hunting Permit and be accompanied by a parent or guardian to hunt with a firearm. All persons between 12 and 16 years of age must possess both a valid Hunting Permit and a Firearm Safety Certificate to hunt alone with a firearm. A 12-16 year old may hunt with a firearm without a Firearm Safety Certificate only while accompanied by an adult at least 21 years of age.~~

*All persons under sixteen (16) years of age must possess a valid Firearms Safety Certificate issued by the Reservation or the State of Minnesota in order to hunt with a firearm. All persons under twelve (12) years of age must be accompanied by a parent or guardian to hunt with a firearm. Persons twelve (12) to sixteen (16) years of age must be accompanied by a parent or guardian to hunt big game with a firearm. All persons hunting big game by means of firearm shall wear red or blaze orange clothing visible over at least fifty percent of their body.*

## CHAPTER IV. RICING REGULATIONS.

### SECTION 41.01.

Every member of the Leech Lake Band of Chippewa Indians who gathers wild rice within the Leech Lake Reservation, *or boundary waters thereof*, must have in his or her possession a proper Band Ricing Permit.

### SECTION 41.02

If the Conservation Committee determines that it is in the best interest of the Leech Lake Band of Chippewa Indians, it may issue a Tribal Ricing Identification Permit to (1) any enrolled member of the Minnesota Chippewa Tribe who is not enrolled with the Leech Lake Band (2) *any other Indian who resides within the Leech Lake Reservation but is not enrolled with the Minnesota Chippewa Tribe*, and (3) *to any visiting Indian officials*. Such a permit must be in the possession of any such person who gathers wild rice within the Leech Lake Reservation.

### SECTION 41.03

Fees may be charged in the discretion of the Conservation Committee for the issuance of the permits required under Section 41.01 and 41.02. The Committee may in its discretion charge a greater fee for a Non-Band Ricing Permit than for a Band Ricing Permit.

## SECTION 42.01

The Conservation Committee shall determine each year, and shall post notices announcing, the season for the harvesting of wild rice that year and the length of time per day during which wild rice may be harvested.

## SECTION 42.02. METHODS OF HARVEST

(1) No watercraft may be used for the harvest of wild rice other than a boat, skiff, or canoe, propelled by hand, which boat, skiff or canoe may have a top width of not more than 36 inches and a length of not more than 18 feet, nor may any machine or device be used for the harvest of wild rice other than a flail not more than 30 inches in length, nor more than one (1) pound in weight, which flail must be held and operated by hand.

(2) No pole may be used for propelling any watercraft utilized for the gathering of wild rice unless such pole is forked at the end, with each branch less than 12 inches in length.

(3) **Use of machines in the harvest of wild rice is prohibited.**

## SECTION 43.01.

None of the provisions of these regulations shall apply to the gathering of paddy rice.

## CHAPTER V. RESERVATION COURT.

### SECTION 50.01.

A. The Leech Lake Reservation Court shall have jurisdiction of all violations of these ordinances. This Court shall consist of one Chief Judge to be selected in the following manner: The Leech Lake Tribal Council will select a Chief Judge from a competent candidate for said position. An Associate Judge shall be selected in the same manner as above and may be designated by the Chief Judge to serve in his absence, or in the event of his temporary disqualification.

B. Any adult Indian over the age of twenty-one (21) years, and whether a resident of the Reservation or not, shall be eligible for appointment a Judge, provided no person may hold such office who has been convicted of a felony or, within one (1) year then past, of a misdemeanor.

C. Any Judge of the Leech Lake Reservation Court may be suspended, dismissed or removed by the Leech Lake Tribal Council for cause. Each Judge shall be appointed for a term of three (3) years, unless sooner removed for cause, but shall be eligible for reappointment.

D. In case of a vacancy through resignation, the judgeship will be filled by an appointment through a majority vote of the Leech Lake Tribal Council.

E. It shall be the duty of the Court to judge all cases properly brought before it. This Court shall decide in a fair and just manner whether violations of this ordinance have been committed.

F. All fines or penalties imposed shall be in accordance with the provisions set forth in Section 51.03 of this ordinance.

G. Court will convene in the Community Building or any other building designated by the Leech Lake Reservation Tribal Council upon request of the Chief Judge.

H. The Court shall collect all fines and other monies generated through enforcement of these ordinances.

I. All fines, fees and receipts collected shall be disposed of in the manner prescribed by Section 51.04 of this Ordinance.

#### SECTION 50.02. COURT PROCEDURE.

A. Sessions of the Leech Lake Reservation Court for the trial or hearing of cases brought under this Code shall be held by the Chief Judge, or the Associate Judge in the absence or disability of the Chief Judge.

B. All prosecutions shall be brought in the name of the Leech Lake Band of Chippewa Indians.

C. The Leech Lake Tribal Council shall appoint a prosecutor to prosecute any person or persons charged with offenses against the provisions set forth in this Code.

### SECTION 50.03. APPELLATE COURT

The Leech Lake Tribal Council shall be the Appellate Court, and the Chairman of the Tribal Council shall preside as the Chief Judge thereof. Any Indian convicted by the Leech Lake Reservation Court may request a review of the Appellate Court by giving verbal or written notice within forty-eight (48) hours after the time of sentence and posting a bond with the Clerk of Court of Twenty-five Dollars (\$25.00) to cover the Court costs. The Appellate Court shall hear the case and may, by majority vote, affirm or reverse the trial judgement or reduce the sentence or penalty. If the conviction is reversed or the sentence or penalty is so modified, the cash deposit shall be refunded to the Defendant. In any case where the party has perfected the right of review as established herein, the judgement of the Trial Judge shall not be executed until after final disposition by the Appellate Court. If any member of of the Appellate Court is related to a party concerned in a trial by blood or marriage in the first or second degree, such member of the Court shall disqualify himself from serving on the Court in such case.

### SECTION 50.04. WITNESS.

The Judges of the Leech Lake Reservation Court shall have the power to issue subpoenas for the attendance of witnesses on the request of any parties to the case, which subpoenas shall bear the signature of the Judge issuing it. Each witness answering such subpoenas shall be entitled to a fee of a minimum of Five Dollars (\$5.00) *per* day for each day his services are required for such payments. No witness fee shall be paid to a complaining witness who signs the complaint. Service of subpoenas shall be by Reservation

Conservation Officers or by an Indian appointed by the Court for that purpose. Witnesses who testify voluntarily shall be paid by the party calling them. Any party to the case who desires to have witnesses subpoenaed must make a deposit of Five Dollars (\$5.00) in case the Court is required to send an officer to subpoena any witness.

#### **SECTION 50.05 SPOKESMAN OR OTHER REPRESENTATIVE.**

Any person appearing as a defendant shall have a right to a spokesman to assist him in presenting his case, provided that such spokesman shall have first been approved to so act by the Tribal Judge or in advance by the Chief Judge. The Court shall adopt such standards for approval of spokesmen as it may deem necessary to insure effective representation. The Court may appoint a spokesman to assist any person if it appears necessary to protect such person's rights. Any defendant shall also have the right to be represented by an attorney at law, provided that such attorney has made proper application to the Court for admission to practice before it.

#### **SECTION 50.06. CLERK OF COURT**

The Leech Lake Tribal Council shall appoint a Clerk of Court for the Leech Lake Reservation Court. The Clerk of the Leech Lake Reservation Court shall render assistance to the Court, to the Band Conservation Officers and to the individual members of the Reservation in the drafting of complaints, subpoenas, warrants and commitments and any other documents incidental to the lawful functions of the Court. It shall be the further duty of said Clerk to attend and keep a written record of all proceeding of the Court, to administer oaths to witnesses, to collect fines paid and to pay all fees authorized by these

regulations. It shall also be the duty of the Clerk to receive all fees for the issuance of Reservation Hunting and Fishing Licenses. The Clerk shall make an accounting from time to time, in a itemized form, all funds received and disbursed by him, to the Leech Lake Reservation Court. The Clerk shall receive reasonable compensation to be fixed by the Tribal Council.

#### **SECTION 50.07. RECORDS.**

The Leech Lake Reservation Court shall be required to keep for inspection by duly qualified officials, a record of all proceedings of the Court, which record shall reflect the title of the case, the names of the parties, the substance of the complaint or trial, by whom conducted, the findings and judgment of the Court, together with any other facts or circumstances deemed pertinent to the case.

#### **SECTION 50.08. COMPLAINTS.**

No complaints filed with the Leech Lake Reservation Court shall be valid unless it shall bear the signature of the complainant or complaining witness, witnessed by a duly qualified Judge of the Leech Lake Reservation Court.

#### **SECTION 50.09. WARRANTS TO APPREHEND.**

Judges of the Leech Lake Reservation Court shall have the authority to issue warrants of arrest, said warrants to issue in the discretion of the Court only after a written complaint shall have been filed, bearing the signature of the complaining witness. Service of such warrants shall be made by a duly qualified Leech Lake Conservation Officer. No warrant

of arrest shall be valid unless it bears the signature of a duly qualified Judge of the Leech Lake Reservation Court.

**SECTION 51.01. ARRESTS.**

No Reservation Conservation Officer, nor other officer or person designated to serve warrants, shall arrest any person for any offense defined by these regulations, except when such offense shall occur in the presence of the arresting officer, or member of the Band or he shall have reasonable evidence that the person arrested has committed an offense, or the officer shall have a warrant commanding him to apprehend such person.

**SECTION 51.02. SEARCH WARRANTS.**

The Chief Judge or an Associate Judge of the Leech Lake Reservation Court shall have authority to issue warrants for search and seizure of the premises and property of any person under the jurisdiction of said Court. However, no warrant of search and seizure shall be issued except upon a duly signed and written complaint based upon reliable information or belief and charging the commission of some offense against these regulations.

### SECTION 51.03. PENALTIES.

(1) Any Indian who violates any provision of this Conservation Code shall be deemed guilty of an offense; and upon conviction thereof shall be sentenced to payment of a fine of not less than Ten Dollars (\$10.00) nor more than Five Hundred Dollars (\$500.00), an to forfeiture of all game, fish, nets, guns, wild rice, buoy, autos, boats, and peltries in his possession and relating to said violation or sentenced to serve a jail term of up to 180 days, or both, or any other penalty as deemed appropriate by the Judge. Those offenses, however, defined as petty misdemeanors are subject to a maximum penalty of One Hundred Dollars (\$100.00) and any forfeiture as above stated and are to be tried to the Court without a jury right. The following offenses shall be petty misdemeanors, (first offenses only):

Ricing:

- 1) Harvesting without permit;
- 2) Illegal pole, boat, flails;
- 3) Failure to have permit in possession;
- 4) Miscellaneous ricing violations.

Fishing:

- 1) Angling without permit;

- 2) Game fish out of season (1-4 only);
- 3) Rough fish out of season;
- 4) Miscellaneous fishing violations.

Hunting:

- 1) Violation of small game or bird limits (1-3 only);
- 2) Carrying loaded firearm in moving vehicle (day only);
- 3) Miscellaneous hunting violations.

Trapping:

- 1) No permit;
- 2) Tag violation;
- 3) Limit violation (each pelt is a separate offense).

(2) The Leech Lake Reservation Court may in its discretion, in addition to the above penalties, suspend the hunting, fishing, wild ricing or trapping rights, permits or license of any violator of this Code for a period of up to one (1) year's duration.

(3) Any non-Indian or person not subject to the Jurisdiction of the Leech Lake Reservation Court who violates any provision of this Code shall be subject to the penalties provided for in Public Law 86-634, 86th Congress, H.R. 4386, dated July 12, 1960:

"1164 : Destroying boundary and warning signs: Whoever willfully destroys, defaces, or removes any sign erected by an Indian Tribe, or Government agency (1) to indicate the boundary of an Indian Reservation or of any Indian Country as defined in Section 1151 of this title or (2) to give notice that hunting, trapping, or fishings is not permitted thereon

without lawful authority or permission, shall be fined no more than \$250 or imprisoned not more than six (6) months, or both."

'1165: Hunting, trapping or fishing on Indian Land: Whoever, without lawful authority or permission, willfully and knowingly goes upon land that belongs to any Indian or Indian Tribe, Band or group and either are held by the United States in trust or are subject to restriction against alienation imposed by the United States, that are reserved for Indian use, for the purpose of hunting, trapping or fishing thereon shall be fined not more than \$250 or imprisoned not more than ninety (90) days, or both, all game, fish and peltries in his possession shall be forfeited."

#### SECTION 51.04. DISPOSITION OF FUNDS.

All fines and other monies collected by the Leech Lake Reservation Court shall be deposited to an Indian money account, entitled "Fish and Game Fund". The use of this fund shall be limited to the enforcement of this Code or to the promulgation and development of fish and wild game, or other appropriate governmental uses as designated by the Leech Lake Tribal Council, and expenditures there from shall be made only upon specific authorization by the Leech Lake Tribal Council.

**CHAPTER VI. GENERAL.**

**SECTION 60.01. REPEALER PROVISION.**

All prior versions of the Conservation Code of the Leech Lake Band of Chippewa Indians and ordinances and resolutions of the Leech Lake Tribal Council which are inconsistent herewith are hereby repealed.

**SECTION 60.02. EFFECTIVE DATE.**

This Code will be effective May 1, 1983.

**BAIL SCHEDULE  
LEECH LAKE RESERVATION CONSERVATION CODE  
July 1, 1984**

<u>Section</u>	<u>Fishing violations</u>	<u>Amount</u>
21.01	Angling without permit	\$ 50.00
21.01	Netting without permit (personal use)	
	A. Game fish	100.00
	B. Rough fish	50.00
22.01-3	Use of gill net during closed season	300.00
23.01	Commercial rough fishing without permit.	200.00
23.01	Commercial game fishing	500.00
22.01-3	Taking game fish during closed season.	
	A. 1-4 fish	100.00
	B. 4-over	25.00
22.01-7	Taking rough fish during closed season.	
	A. 1-4 fish	50.00
	B. 4-over	15.00
22.01-1	Illegal equipment of means (explosives, drugs, poisons, lime, medicated bait, deleterious substances)	500.00
23.02-2	Failure to return live, uninjured game fish taken while commercial rough fishing.	50.00
1301-4	Illegal size or use of nets	200.00
23.01	Untagged nets (no identification)	100.00
22.01-8	Fishing in posted "No" fishing area.	25.00
22.01-5	Spearing Muskellunge	200.00
13.03	Transporting or possessing illegally taken fish.	
	A. Game fish	300.00
	B. Rough fish	150.00

23.02	Sale or barter of:	
	A. Game fish	500.00
	B. Rough fish	300.00
13.01-1	Permitting another person to use personal permit.	50.00
13.01-3	Wanton destruction of fish	300.00
13.01-6	Fraud in procurement of permit	100.00
23.03	Dark houses not marked.	25.00
23.03	Dark houses on ice after March 1	50.00
22.10-10	Spear in possession by open water	25.00
13.01-5	Fishing while intoxicated	50.00
21.01	No fishing license in possession	15.00

**Section                      Hunting Violations                      Amount**

31.01	No hunting license or invalid license	\$ 50.00
31.01	No hunting license in possession	15.00
32.01-2	Sale or barter of :	
	A. Small game	100.00
	B. Big game	500.00
32.02-3	Migratory Bird Act Violation	
	A. 1-4 ducks	50.00
	B. 4-more	15.00
	C. Use of lead shot	50.00
32.01	Taking of rare or endangered animals or birds or protected animals (moose, elk, fisher, martin & timberwolf)	500.00
13.01-4	Hunting during closed season	
	A. Small game	25.00
	B. Big game	500.00
13.01-4	Hunting during closed hours	
	A. Small game	50.00
	B. Big game	500.00
13.01-4	Taking over limit	
	A. Small game - 1	50.00
	B. Small game - 1 or more	20.00@
	C. Big game	500.00@

<u>Section</u>	<u>Ricing Violations</u>	<u>Amount</u>
41.01	Harvesting wild rice without a permit	\$ 50.00
12.02-1	Indian rice buyer buying rice without a permit of Reservation in possession	500.00
42.02-1-2	Illegal boats, poles or flails	50.00
42.02-3	Harvesting with machine	500.00
42.01	Harvesting during closed season or illegal hours	100.00
42.01	Harvesting at night	200.00
41.01	No ricing permit in possession	25.00
13.01-3	Wanton destruction of rice beds	500.00
13.01-5	Ricing under influence of drugs, alcohol or narcotics	50.00

<u>Section</u>	<u>Other Violations</u>	<u>Amount</u>
13.01-6	Fraud in attaining a permit	\$ 100.00
13.01-10	Refusal to display a permit	100.00
13.01-11	Willfully hindering, resisting or assaulting a Conservation Officer in performance of his official duties	500.00 + 180 days
13.01-2	Failure to stop for flashing red lights	300.00
	Disobedience of Court Order	100.00
	Failure to show or be excused for jury duty	15.00
	Contempt of court	100.00
51.03-3	Destroying signs	250.00 + 90 days
Ord. 73-2	Destroying or disturbing burial grounds	500.00 + 6 months
Ord. 82-2	Unregistered or no-display of boat registration	25.00

13.01-3	Wanton waste or destruction of game	
	A. Small game	100.00
	B. Big game	500.00
13.01-7	Carrying a loaded firearm in moving vehicle	
	A. Daytime	100.00
	B. Night	200.00
13.01-8	Chasing with snowmobile	
	A. Small game	100.00
	B. Big game	500.00
13.01-9	Hunting with artificial light	500.00
32.06	Shooting at big game down or across public road.	300.00
32.06	Taking big game with aid of dogs	500.00
32.06	Taking game from moving vehicle (including snowmobile)	
	A. Small game	100.00
	B. Big game	500.00
32.03-1	Untagged game animal (transporting or possession in camp, improperly tagged)	200.00
32.06	Firing within 500 ft. from an open public campground or occupied dwelling	300.00
32.03-3	Illegal firearm - set gun or swivel gun	500.00
32.01-3	Uncased firearm at night	100.00
32.04-5	Disturbing beaver dens	100.00

<u>Section</u>	<u>Trapping violations</u>	<u>Amount</u>
32.04-1	Trapping during closed season	\$ 100.00
32.04-2	Traps not having identification	25.00
31.01	Trapping without a permit	50.00

Ord. 82-2	Unregistered or no-display of ATV registration	25.00
Ord. 82-2	Unregistered or no-display of snowmobile registration	25.00
Ord. 82-2	Illegal transfer of boat registration	20.00
Ord. 82-2	Illegal transfer of ATV registration	20.00
Ord. 82-2	Illegal transfer of snowmobile registration	20.00
13.01-1	Obstruction of Conservation Officer in performance of his official duties	500.00 + 90 days

<u>Section</u>	<u>Commercial Violations</u>	<u>Amount</u>
23.03-6B	Taking leeches or minnows without a permit	\$ 50.00
23.03-8	Set net or trap too deep, failure to mark or identify properly.	100.00
23.03-9	Set net or trap within 100 feet of another permittee.	50.00
23.03-10	Tend or disturb net or trap without written authorization from permittee.	50.00
23.03-11	Unattended nets or traps. Must be tended within 72 hours of being set or previously tended.	50.00
23.03-12	Wanton waste of Minnows or leeches.	150.00

# Leech Lake Tribal Council



IN REPLY REFER TO:

## Leech Lake Tribal Council Ordinance No. 99-01

ELI O. HUNT,  
CHAIRMAN  
LINDA G. JOHNSTON,  
SECRETARY-TREASURER  
ALFRED FAIRBANKS, JR.,  
DISTRICT I REPRESENTATIVE  
JACK H. SEELYE,  
DISTRICT II REPRESENTATIVE  
MYRON F. ELLIS,  
DISTRICT III REPRESENTATIVE

### Protection and Preservation of Wild Rice Beds

**Section 1**     **Intent and Purpose:** Mah-no-min (Wild Rice) has been a staple of the Chippewa People for centuries. Not only has wild rice served as a primary food source, but its traditional harvesting and processing mark a time of social gathering, season change and preparation for the long winter. Chippewa People have traditionally harvested this resource in a way that preserves the rice beds for future use. In order to better protect, preserve and propagate the wild rice resource, which is such an integral part of the Chippewa Culture, these wild rice beds must now come under regulation. The purpose of this Ordinance is to prohibit certain watercraft from entering wild rice beds when that watercraft could cause harm to the rice.

**Section 2**     **Definitions:** For the purpose of this Ordinance, the following words and terms shall be given the following definitions:

- 2.1     Band: The Leech Lake Band of Chippewa Indians, a member Tribe and Reservation of the Minnesota Chippewa Tribe.
- 2.2     Wild Rice Beds: An area within a lake, river or stream where wild rice grows. This species of aquatic vegetation is actually a member of the grass family and is indigenous to Northern Minnesota. It produces edible grains of rice after processing. These wild rice beds also provide food and shelter to many species of fish, mammals and birds.
- 2.3     Traditional Wild Rice Harvesting Equipment and Method: The gathering of wild rice grains by two individuals, using a rice boat or canoe propelled by a push pole and flails (knocking sticks) to knock the heads of grain from the wild rice plant into the canoe or rice boat. This harvesting method is the least disruptive and preserves the wild rice beds for future harvesting.
- 2.4     Acceptable Ricing Watercraft: Canoe or ricing boat whose dimensions are as follows: a maximum top outside width 36 inches with a maximum length of 18 feet. Any extension that increases the normal capacity of the rice boat is prohibited.

wild rice, to ascertain its growth, ripeness, quantity and quality, provided that reasonable care is used to assure the safety of the wild rice bed.

- 6.2 Individuals who are in possession of a valid ricing permit may enter the wild rice beds at appropriate times, in acceptable watercraft, in order to harvest wild rice.
- 6.3 In situations where an emergency, crisis or extreme circumstances exist, any person or persons, any authorized Division of Resources Management personnel or Emergency or Law Enforcement personnel, while in the performance of their official duties, are exempt from the provisions of this ordinance.

**Section 7 Penalties:** Any individual who violates the terms and intent of this ordinance shall be cited and ordered to appear before a judge of the Leech Lake Tribal Court or a court of competent jurisdiction. Fines may be imposed in Tribal Court which will not exceed \$250 per violation, without a written order issued by a judge of the Leech Lake Tribal Court.

**Section 8 Effective Date:** The terms and provisions of this Ordinance will be effective immediately upon its passage by the Leech Lake Reservation Tribal Council.

#### CERTIFICATION

I DO HEREBY CERTIFY, that the foregoing resolution was duly presented and adopted by a vote of 3 For, 0 Against and 0 Silent at a SPECIAL meeting of the Leech Lake Tribal Council, a quorum being present, held on JULY 10, 1998 at Cass Lake, Minnesota.

Eli O. Hunt  
Eli O. Hunt, Chairperson

Linda G. Johnston  
Linda G. Johnston, Secretary-Treasurer

- 2.5 Other Watercraft: Any boat, pontoon, jet-ski, or any other object or apparatus that is used in the water, whether motor driven or propelled by other methods, that is operated by a person or persons, and which is not defined as an "Acceptable Ricing Watercraft" in Section 2.4 of this Ordinance.
- 2.6 Person: Any individual, corporation, partnership or organization.
- 2.7 Leech Lake Reservation: The ancestral homeland of the Leech Lake Band of Chippewa Indians established by the Treaties of 1855, 1864, and 1867 and whose legal boundaries are described by the Memorandum of Settlement Agreement between the Leech Lake Band of Chippewa Indians and the State of Minnesota in the Federal District Court case of Leech Lake Band of Chippewa Indians -vs- Robert L. Herbst, et al.
- 2.8 Boundary Waters: shall mean those lakes, rivers and streams bisected by the exterior geographical borders of the Leech Lake Reservation. Jurisdiction shall extend to include those portions of a body of water which extend outside the exterior boundary line of the Reservation as stated in the Memorandum of Understanding dated August 16, 1995 between the Leech Lake Reservation and the State of Minnesota.

**Section 3** **Prohibitions, Watercraft**: Any watercraft which is **not** defined in Section 2.4 of this Ordinance, as being "Acceptable Wild Rice Watercraft," is **not** permitted in wild rice beds during prohibited times.

**Section 4** **Prohibitions, Time**: No boat or other watercraft shall enter any wild rice bed within the boundaries of the Leech Lake Reservation, nor shall any watercraft enter any wild rice bed which lies within the boundary waters of the Leech Lake Reservation, from the time when fishing season is opened the second Saturday in May to September 15 of each year.

**Section 5** **Enforcement**: Primary responsibility for enforcing this Ordinance shall be vested in Leech Lake Conservation Officers. Other recognized officers authorized to enforce the terms of this Ordinance shall be any officer of the Leech Lake Reservation Law Enforcement Department, County Sheriff's Departments and Minnesota Department of Natural Resources Conservation Officers.

**Section 6** **Exceptions**:

- 6.1 Any authorized Division of Resources Management Personnel, specifically Leech Lake Conservation Officers and Natural Resources Advisory Committee members, may enter any wild rice bed within the exterior boundaries of the Leech Lake Reservation, or within any boundary waters bordering the Leech Lake Reservation, at any time, in order to monitor the

# Leech Lake Tribal Council



IN REPLY REFER TO:

ALFRED R. PEMBERTON,  
CHAIRMAN  
DANIEL S. BROWN,  
SECRETARY-TREASURER  
ALFRED FAIRBANKS, JR.,  
DISTRICT I REPRESENTATIVE  
JACK H. SEELYE,  
DISTRICT II REPRESENTATIVE  
MYRON F. ELLIS,  
DISTRICT III REPRESENTATIVE

## LEECH LAKE RESERVATION TRIBAL COUNCIL ORDINANCE NO. 94-01

### SECTION 1

For the purpose of this Ordinance, the terms described in this Section shall have the meaning ascribed to them:

- a. Bough is a branch of a cedar, white pine, red pine, jack pine, balsam, or spruce tree.
- b. Private land is any land that is clearly marked as such.

### SECTION 2

Except as hereinafter provided, no person shall, after the first day of October 1, 1993, harvest boughs without a permit which is required under Section 4 within the boundaries of the Leech Lake Indian Reservation unless a license for such activity is issued pursuant to this ordinance.

### SECTION 3

Application for permit shall be made to the Director of Resource Management of the Leech Lake Reservation Division of Resource Management or to any of the Leech Lake Reservation License Agents. Each permit shall state the name, address, and tribal identification number of the permittee. In addition, every permit shall display an expiration date on its face, said expiration date shall not exceed one year from the date of issuance.

### SECTION 4

Licensing shall be set by the Leech Lake Tribal Council and is required for the harvesting of boughs within the Leech Lake Reservation.



#### SECTION 5

Duplicate licenses may be issued by the Director of the Division of Resource Management upon request and proof of the loss or destruction of a license issued hereunder.

#### SECTION 6

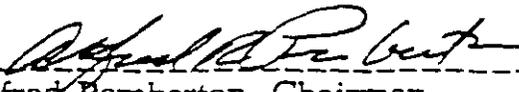
No person shall:

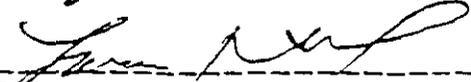
- a. Cut down trees specifically to harvest boughs.
- b. Cut boughs so that it would be detrimental to the health of the tree.
- c. Cut more than one-third' of the live crown from any tree.
- d. Harvest boughs without permit.
- e. Transport boughs without proper permit.
- f. Harvest boughs on private or allotted land without permission.

#### SECTION 7

The Leech Lake Tribal Court shall have exclusive jurisdiction over all matters concerning the enforcement of this ordinance. Any person, association, or corporation found guilty of this offense shall be fined no less than \$50.00 (fifty dollars) or more than \$500.00 (five hundred dollars).

WE DO HEREBY CERTIFY that the foregoing Ordinance was duly adopted on the 4th of October, 1993, by a vote of 2 for and 0 against, and 0 abstaining at a SPECIAL meeting of the Leech Lake Tribal Council, a quorum being present.

  
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Alfred Pemberton, Chairman

  
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James Michaud, Secretary/Treasurer



**LEECH LAKE RESERVATION TRIBAL COUNCIL**

**RESOLUTION NO. 2006-75**

**RESOLUTION AMENDING ORDINANCE No. 98-02 (OPEN BURNING RESTRICTIONS AND PERMITTING REQUIREMENTS)**

**WHEREAS,** the Leech Lake Band of Chippewa Indians is a Federally recognized Indian Tribe organized under the Indian Reorganization Act of 1934, and operating under the Revised Constitution and Bylaws of the Minnesota Chippewa Tribe; and

**WHEREAS,** the Leech Lake Reservation Tribal Council is the duly elected and authorized governing body of the Leech Lake Reservation; and

**WHEREAS,** the Leech Lake Tribal Council is charged with the responsibility of protecting and advocating for the health and welfare of Leech Lake Band members within the Leech Lake Reservation boundaries; and

**WHEREAS,** the Leech Lake Tribal Council has determined that in order to protect the natural resources and air quality of the Leech Lake Reservation as well as to protect the health and welfare of the people, it is necessary to prevent fires by regulating open burning and the use of burn barrels; and

**WHEREAS,** the Leech Lake Tribal Council previously adopted Ordinance No. 98-02 (Open Burning Restrictions and Permitting) to regulate open burning; and

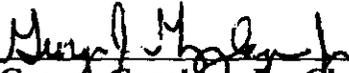
**WHEREAS,** Ordinance No. 98-02 must be amended to include provisions for regulation of burn barrels and to provide a fair and consistent process for permitting burning activities; and

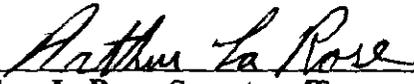
**WHEREAS,** an amended Open Burning, Burn Barrel, and Fire Prevention Ordinance has been drafted which provides the necessary protection to both the resources and the rights of the people of the Leech Lake Reservation;

**NOW THEREFORE BE IT RESOLVED,** that the Leech Lake Tribal Council hereby amends Ordinance No. 98-02 (Open Burning Restrictions and Permitting Requirements) and retitles it as the Leech Lake Band of Ojibwe Open Burning, Burn Barrel, and Fire Prevention Ordinance.

**CERTIFICATION**

**WE DO HEREBY CERTIFY** that the foregoing Resolution was duly presented and acted upon by a vote of 4 for, 0 against and 0 silent at a Special Meeting of the Leech Lake Tribal Council, a quorum being present, held on February 23, 2006 at Cass Lake, Minnesota.

  
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**George Gogglye, Jr., Chairman**  
**Leech Lake Tribal Council**

  
\_\_\_\_\_  
**Arthur LaRose, Secretary/Treasurer**  
**Leech Lake Tribal Council**

**Leech Lake Band of Ojibwe**  
**Ordinance NO. 2006-02**  
**OPEN BURNING, BURN BARREL AND FIRE PREVENTION ORDINANCE**

**Section 1. Purpose and Scope**

1. **Purpose.** The burning of household and other waste can cause severe health problems, pollute the air, soil, and water, and pose a fire danger to the surrounding area. The purpose of this ordinance is to control and monitor the setting of fires and open or barrel burning within the exterior boundaries of the Leech Lake Reservation by any person in order to protect the welfare, peace, safety, environment, and property of the Leech Lake Reservation and its Tribal Membership. In order to protect and preserve the natural and trust resources of the Leech Lake Reservation, the regulation of “open burning” is hereby adopted: Except as provided, no individual within the jurisdiction of the Leech Lake Reservation shall “open burn” without a valid permit issued by the Leech Lake Division of Resource Management (DRM), by the State of Minnesota Division of Natural Resources (DNR), and by the US Forest Service (USFS).
2. **Scope.** This ordinance applies to all open and burn barrel fires within the exterior boundaries of the Leech Lake Reservation.

**Section 2. Definitions.**

- a. **Acceptable Burn Barrel** shall mean a metal drum of at least 55 gallon volume, which:
  1. Has been placed upon blocks made of a material that will not cause the barrel to tip or cause the ground to burn,
  2. Has air vents of approximately “pea size” on the sides and bottom,
  3. Is covered by a screen of not to exceed 1/4 inch mesh, and
  4. Has been inspected by the Division of Resource Management Air Quality Program personnel or LLBO Conservation Officer.
- b. **Band** shall mean the Leech Lake Band of Chippewa Indians/Leech Lake Band of Ojibwe.
- c. **Burn Barrel Fire** shall mean any fire contained in a barrel or other type of containment where the products of combustion are emitted directly into the outdoor atmosphere and are not directed through a stack or chimney, incinerator or other similar device and the purpose of the fire is not for cooking or to provide heat to a dwelling.
- d. **Brush** shall mean woody debris commonly associated with land clearing of all types such as landscaping, trail clearing and general yard maintenance. Additional

materials, which may fall into this category, are clean lumber from demolition (containing no paint, stain, or preservative i.e. green treated), leaves, bark and other woody scraps from various activities.

- e. Burning Permit shall mean a permit issued by the Division of Resource Management or Department of Natural Resources to an individual that allows the burning of certain materials, for specified purposes, as stated in the Ordinance.
- f. Burn Barrel Permits shall mean a permit issued the by the Director of the Division of Resource Management for the purposes of burning yard waste. Permittee must comply with this ordinance and any additional restrictions placed on the permit.
- g. Special Burning Permits shall mean a permit issued by the Director of the Division of Resource Management or a designated fire warden for the purposes of construction, utility work, management of forests, prairie or wildlife habitats. All Special Permits shall be issued pursuant to an approved burn plan.
- h. Burn Plan shall mean a specific plan with the Director of the Division of Resource Management when an application for a Special Burning Permit is requested. The Burn Plan must state the purpose of the burn, the duration of the burn, the places and sites of the burn, and name a responsible individual in whose name the permit is to be issued.
- i. Ceremonial Fires shall mean fires that are set for traditional Native purposes such as for Pow Wows, the heating of rocks for sweat lodges, and for other traditional ceremonial purposes. Any person who lights a fire for ceremonial purposes shall ensure that precautions are taken to prevent the spread of the fire outside the intended area and that the fire is attended at all times until it has extinguished itself.
- j. Forestry and Air Quality Program employees shall mean agents empowered to oversee and protect the natural resources and work for the Division of Resource Management.
- k. Construction/Demolition Material shall mean wood and non-wood products commonly associated with the demolition of structures, including but not limited to shingles of all types, insulation of all types, gypsum board, tar paper, metal plumbing, ductwork, wiring, and chemically-treated wood of all types.
- l. Defined Area shall mean a specific area intended to extend at least 10 feet around the material to be burned. The defined area may be encompassed by rocks, snow cover, other non-combustible materials or contained within a burn barrel.
- m. Department of Natural Resources shall mean the Minnesota State Department of Natural Resources.
- n. Division of Resource Management (DRM) shall mean the Division of Resource Management a Division of the Leech Lake Tribal Government.
- o. Fire Warden shall mean a volunteer commissioned by the DRM Director, by the Minnesota DNR, or by the USFS to issue open burning permits.
- p. Forest Fire shall mean uncontrolled, wild, or running fires occurring on forest, marsh, field, cutover, or other lands within the exterior boundaries of the Leech Lake Reservation.
- q. Hazardous Waste shall mean any commercial chemical substance designated pursuant to the Federal Water Pollution Control Act, under 33 U.S.C. Section

- 1321(b)(2)(A); any hazardous air pollutant listed pursuant to the Clean Air Act, under 42 U.S.C. Section 7412; any hazardous waste defined under the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 *et seq.*, as amended, and any other substance which constitutes a hazardous waste under Leech Lake Tribal, State of Minnesota, or Federal law.
- r. Individual or Persons shall mean any individual, organization or entity that conducts activities governed by this Ordinance, or owns property, or possesses an interest in property affected by activities governed by this Ordinance.
  - s. Kitchen Garbage shall mean animal and vegetable waste resulting from the handling, preparation, cooking, and/or consumption of foods.
  - t. Jurisdiction shall mean the authority granted the Tribal Court to exercise power and authority over specific subject matter and persons within the jurisdictional boundaries of the Leech Lake Reservation. Law Enforcement Officers shall mean authorized Officers empowered to enforce this Ordinance on the Leech Lake Reservation, which shall include but not limited to Tribal Police, Tribal or State Conservation Officers, County Sheriffs, or others.
  - u. Leech Lake Reservation shall mean all lands and waters within the exterior boundary lines described in the Memorandum of Settlement and Agreement entered into between the State of Minnesota and the Leech Lake Band of Chippewa Indians as determined by the Federal District Court case of Leech Lake Band of Chippewa Indians vs. Robert L. Herbst et al.
  - v. Local Authority shall mean authorized agents of Township, County, City, State, or Federal Government. For the purposes of the Ordinance “Local Authority” shall include Fire Wardens, State Department of Natural Resources Personnel, US Forest Service Personnel and Law Enforcement Personnel.
  - w. Non-recyclable Material shall mean Pyrex glass, window glass, light bulbs, mirrors, china, Styrofoam and melamine type plastics, waxed paper, waxed cardboard, soiled paper, household garbage, bottle or jar caps and any material for which there is no destination point for reclamation or processing.
  - x. Noxious shall mean harmful to health, injurious.
  - y. Nuisance shall mean any burn that endangers life or health, give offense to the senses, or obstructs reasonable and comfortable use of property.
  - z. Open Burning shall mean any fire wherein the products of combustion are emitted directly into the outdoor atmosphere and are not directed through a stack or chimney, incinerator or other similar device. “Open burning” includes, but is not limited to: brush pile burning, burning in pits/depressions, in any open container, and in fire rings.
  - aa. Owner shall mean the person(s) or entity(ies) which hold legal or beneficial title to real property. Owner also means landlord and lessee.
  - bb. Permitee shall mean an adult over the age of 18 who obtained and signed for the permit. This person is the responsible party for the burn or burn barrel.
  - cc. Recyclable Material shall mean brown, clear, and green container glass, aluminum cans, steel containers, bi-metal containers, plastic containers with #1 thru #7 inside a triangle on the bottom, corrugated cardboard, newspaper, magazines, mixed

- paper, office paper, used motor oil, vehicle tires, and any other material for which there is a destination point for reclamation or processing.
- dd. Recreational Fires shall mean fires set for recreational, food preparation, or social purposes including fires set for survival and warmth. The size of the fire can be no greater than three feet in diameter and three feet high and has had the ground five feet from the base of the fire cleared of all combustible material.
  - ee. Responsible Party shall mean the individual who obtained and signed the burning permit or for non-permitted fires the landowner or lessee.
  - ff. Running fire shall mean a fire that is spreading along the ground and unconstrained.
  - gg. Snow Cover shall mean continuous snow-covered ground with an average depth of three inches of snow. For the purposes of burning the snow cover must extend at least ten feet around the material to be burned.
  - hh. Special Burning Restriction/Ban shall mean a restriction or ban issued at the discretion of the Director of Resource Management when the conditions warrant such a restriction or ban in order to protect the natural and trust resources of the Band.
  - ii. Tended Fires shall mean a fire that is continuously attended by an individual and not left to burn or smolder without constant monitoring.
  - jj. Tribal Court shall mean the Leech Lake Tribal Court that is authorized to hear and determine cases where violations of Tribal laws, Codes, and/or Ordinances are at issue.
  - kk. United States Forest Service shall mean an agency of the Department of Agriculture of the United States Government.
  - ll. Warming and Food Preparation Fires shall mean fires set for cooking/preparation or warming purposes, which is not more than three feet in diameter by three feet high, and has had the ground five feet from the base of the fire cleared of all combustible material. Any person who lights or allows someone to light a fire under these circumstances shall extinguish such fire before leaving it, and upon failure to do so will be in violation of this Ordinance. This also includes fires contained in a charcoal/gas grill, camp stove, or other device designed for the purpose of cooking, or heating.

### **Section 3. General Provisions**

Within the exterior boundaries of the Leech Lake Reservation, it shall be unlawful for any person to set any fire unless it shall be attended at all times and he/she has first obtained a Burning Permit. Only exceptions are:

- a) Warming and Food Preparation Fires.
- b) Ceremonial Fires.

### **Section 4. Permit Application and Issuance**

Permit Application. Permits may be obtained from the Leech Lake DRM (during normal

business hours 8am to 4:30pm) or from a designated Fire Warden. Burn Barrel permits may be available after filing out an application that can be picked up at the Leech Lake DRM and passing certification.

Open burn permit for a burn other than a burn barrel:

- a) Name, physical address, and phone number of person responsible for the burn.
- b) Responsible parties who may be attending the burn.
- c) Location of the burn (DRM Director may require an inspection of the site by the Conservation Officers or the Air Quality Department).
- d) The signature of the applicant stating the following:
  - i. that he or she has been given educational material regarding the environmental and health hazards of open burning,
  - ii. has read and understood the material, and
  - iii. has had an opportunity to ask questions of the issuing agent about the burning regulations.
- e) Permit Issuance. Permits issued pursuant to this Section shall include but not be limited to restrictions concerning: time of day, location, minimum required precautionary measures, and the length of the burning period of the permit.
- f) Burn permits for open burns expire upon completion of the open burn, but in no case beyond 3 days from the date of issuance of the permit. Subsequent burns at the same location require separate permits.
- g) No fee shall be charged for a burn permit.

The application shall contain at least the following information for a burn barrel permit:

- h) A burn barrel permit shall follow the same as stated above a-e with the following provisions:
  - i) If the permit is for a burn barrel, the burn barrel must be inspected and approved by the Air Quality Program or by a Conservation Officer prior to issuance of the permit. Once issued the permit is valid for one year. This permit is only available from the DRM offices.
  - j) Burn permits for burn barrels shall expire on April 1<sup>st</sup> of each year.
  - k) The permit cost is \$50.00 for one year.

## **Section 5. Permit Considerations**

Burning permits shall be issued only after a determination by the DRM, DNR, or USFS fire wardens that allowing the permittee to burn if he or she complies with the conditions of the permit and takes all reasonable precautions to prevent the escape of the fire will minimize the danger to the resources.

1. Open burning for which an open burning permit may be issued are:
  - a) Elimination by fire of health hazards that cannot be abated by any other practical means;
  - b) Ground thawing for utility, water, and sewer repair or minor construction;
  - c) Disposal of lopped and limbed trees, brush, leaves, grass, and other vegetation;
  - d) For the disposal of burnable building materials such as unpainted or untreated lumber, wood shakes or other unpainted, unstained, untreated wood products generated by construction where recycling, reuse, chipping or other alternative disposal methods are not

practical.

2. A Special Burning Permit may be issued by the DRM Director for:
  - a) Major construction;
  - b) For the creation and maintenance of firebreaks and right of ways;
  - c) For the disposal of vegetative matter of the purposes of managing forests, prairies, and/or wildlife habitats;
  - d) Disposal of trees, brush, grass, and other vegetative matter in the development and maintenance of land and rights of ways where chipping, composting or other alternative methods are not practical.
  - e) When large piles of debris, including by not limited to slash piles, are to be burned, the permittee should notify the Leech Lake DRM, local fire departments, and DNR of the location and duration of the burn. This is to notify the appropriate authorities and assist in communications.
  - f) Fireworks displays

## **Section 6. Permitted Burning**

*Windy Conditions. No burning shall occur when wind speeds exceed 10 miles per hour or when wind conditions are such that sparks or embers from the fire may be spread outside the parameters of the burn plan. The only exception is for ceremonial fires for which all reasonable precautions are taken to prevent the spread of the fire.*

1. Open Burning
  - a) Adequate provision shall be made to prevent fire from spreading (garden hose or other sufficient source of water, shovels, dirt, etc.).
  - b) Fires shall be constantly attended by the permit holder, or by responsible designee (18 years of age or older), from commencement of the burn until the fire is completely extinguished (fire remains are cold).
  - c) Fires must not be allowed to smolder with no flame present, except when conducted under Special Permit issued by the DRM Director or fire wardens in accordance with an approved burn plan.
  - d) Brush burning shall be limited to wood products only, which includes only twigs, brush, leaves, grass, and untreated, unpainted sawn wood or those items defined as brush.
  - e) No construction/demolition materials may be burned.
  - f) No household garbage may be burned.
  - g) No chemically or creosote treated wood may be burned.
  - h) No woody materials which may be contaminated with other construction materials or have attached to them other construction materials, including but not limited to: tar paper, insulations of all types, shingles, gypsum board, paint, stain, and other wall treatments may be burned.
  - i) No recyclable materials as defined in this ordinance may be burned.
  - j) No materials such as rubber, roofing, or any similar material or petroleum product is may be burned.

- k) No open fires shall be kindled within fifty feet (50') of any property line, public right-of-way, structure/building, fence, or combustible growth or material other than what is intended to be burned.
- l) Burn piles may be no larger than five feet by five feet by five feet (5' by 5' by 5').
- m) Burning of uncut grass, brush, or vegetation (running fire) is prohibited, except by special permit issued for exceptional circumstances only after inspection of the proposed burn site and agreement with the proposed burn by the DRM, DNR, USFS fire warden or DRM Director.
- n) Burning may only be conducted between the hours of 6:00 PM and 8:00 AM or as specified by the permit.
- o) The prevailing wind at the time of the burn must be such that no imminent danger is posed to nearby residences, occupied buildings, trust or natural resource land, wildlife or endangered, threatened or protected species.
- p) The burn must be kept at distance from airports, landing strips and roadways so as to prevent smoke drifting near or onto and be conducted under conditions and controls that minimize the creation of any air or motor vehicle traffic hazard.
- q) Burning is prohibited at all times when a general fire ban is in effect, as declared by the DRM Director. Information regarding the restrictions and bans can be obtained at the DRM office or by calling 218-335-7400.

## 2. Barrel Burning

- a) Barrel burning shall be limited to burning of small woody debris, leaves, and grass clippings in an acceptable burn barrel.
- b) No household garbage may be burned.
- c) No recyclable materials as defined in this ordinance may be burned.
- d) No demolition materials as defined in this ordinance may be burned.
- e) No chemically or creosote treated wood may be burned.
- f) No materials such as rubber, roofing, or any other such material, or petroleum product may be burned.
- g) Barrels must be covered with a screen while burning, which will hold down flying ash. The screen must be in sound condition and have a mesh size no larger than one-quarter inch (1/4").
- h) The barrel must not be contaminated with paint, oil, gasoline, or other potentially harmful or noxious substance.
- i) Barrels must be continually observed by a responsible individual, over the age of 18, during the burning process and completely extinguished before being left. It is a violation of this ordinance to leave a burn barrel unattended while burning or smoldering.
- j) Barrel burning may be conducted between the hours of 6:00 PM and 8:00 AM.
- k) Burn barrels must be located in a ten-foot (10') clear area, a minimum of twenty-five feet (25') from buildings and combustibles.

## **Section 7. Open Burning Restrictions and Prohibitions**

**No person shall conduct, cause or permit the burning of any prohibited materials. The burning of any prohibited materials shall be deemed a violation. Prohibited materials and**

**restrictions are as follows:**

Materials prohibited from burning are:

- a) Any Plastics (including but not limited to Styrofoam, "pop" bottles, melamine type plastics)
- b) Recyclable material as defined in Section 2 (aa)
- c) Household trash or garbage (including kitchen garbage)
- d) Industrial solid waste
- e) Disposable Diapers
- f) Oil
- g) Gasoline
- h) Paint
- i) Cardboard
- j) Non-recyclable paper containing plastic, paint or other matter that is noxious when burned
- k) Dead animals not being processed or cooked as food products
- l) Any material that emits dense smoke or noxious odors
- m) Thermometers containing mercury
- n) Any item known to contain mercury or lead (including batteries)
- o) Tires or any rubber materials
- p) Any petroleum products
- q) Construction/Demolition material, except for wood scraps with no paint, stain, chemical treatment or other contaminants
- r) Hazardous Wastes
- s) Motor vehicles
- t) Salvage materials

**Section 8. Special Authority to Restrict Burning**

The DRM Director has the authority to restrict and forbid the setting of any type of fire or burning within the exterior boundaries of the Leech Lake Reservation, by any person, when fire danger is high or extreme. For purposes of this section setting of fires will include, but will not be limited to, the burning of leaves, campfires, outside cooking units, etc. The only exceptions will be those homes where a stove or appliance is located outside the home which is needed in the preparation of food or for heat and for ceremonial uses when the DRM is notified of the general location of the fire and can assure that proper fire safety precautions have been met. Notice will be given to the public when this restriction goes into effect by posting of notices at each Community Center, the RTC Tribal Office, and the Division of Resource Management.

**Section 9. Permits**

**The following conditions and terms shall apply to the issuance of a burning permit within the boundaries and jurisdiction of the Leech Lake Reservation:**

**A. Permits**

1. **Burning Permit Issuance**: the DRM Director, DRM fire wardens, DNR fire wardens, or USFS fire wardens may issue burning Permits.
2. **Recognized Valid Burning Permits**: Burning Permits issued by Federal, State, or Local Authorities, or their authorized licensing agents, shall be recognized. Violations of the terms and conditions of such permit on the Leech Lake Reservation are actionable under this Ordinance.
3. **Special Burning permits**: only the DRM Director can issue Special Burning Permits to individuals representing construction and/or utility companies, to conservation personnel, or to other individuals who the Director of Resource Management deems eligible for a Special Burning Permit. These permits are also issued for any burn to take place between the hours of 8 AM and 6 PM. A Special Burning Permit may only be issued upon the submission and approval of an acceptable Burn Plan and shall be issued only to an individual who shall be responsible to assure that all relevant provisions of this Ordinance are complied with. An individual must end all burning and extinguish all existing burns should the Director of the DRM issue a "Special Burning Restriction/Ban" during the lifetime of the Special Burning Permit.

**B. Cost of Open Burning Permits**

An open burning permit shall be issued to an individual at no cost.

**C. Cost of Special Burning Permits**

A special burning permit shall be issued to an individual at a cost of \$25.

**D. Cost of Burn Barrel Permits**

A burn barrel permit may be issued only after a barrel has passed inspection by a designated DRM burn barrel inspector. The cost of the burn barrel permit is \$ 50.00.

**E. Duration of Burning Permits**

A Permit issued to an individual under this Ordinance may be issued for a period of time not to exceed three (3) days. A Special Burning Permit may be issued for a period of time longer than three (3) days and shall require an approved Burn Plan. All burning permits shall be subject to any "Special Burning Restriction/Ban" issued by the DRM Director. It shall be the responsibility of the holder to know if, and when, Burn Restrictions or Bans have been issued.

**F. Revocation of a Burning Permit**

Any permit issued under this Ordinance is subject to revocation by the DRM Director if:

- a) An alternative practical method of disposal of the material is identified;
- b) A fire hazard exists or develops during the course of the burn;
- c) The permit holder violates terms and conditions of this Ordinance or the permit;
- d) A nuisance condition has resulted from the burning, or;
- e) The DRM Director issues a Special Burning Restriction or Ban.

**G. Denial of a Permit**

A permit may be denied if:

- a) An alternative practical method of disposal of the material is available;
- b) The burning cannot be conducted according to the requirements of this ordinance;
- c) A nuisance or hazard condition will result from the burning; or
- d) The individual applying for a permit has a history of violating this ordinance.

#### H. Posting of Special Burning Restrictions/Bans

When conditions warrant, as determined by the DRM Director, a Special Burning Restriction and /or Ban may be declared. The Leech Lake Conservation Officers shall post Restriction/Bans at the DRM office and each Community Center on the Leech Lake Reservation. In addition, Conservation Officers, Law Enforcement Officers of the Leech Lake Reservation, and fire wardens will be notified in order to enforce the Restriction/Ban. The Director shall specify dates and times to the best of his/her ability, and has the option of lifting the restriction/ban before its expiration, or may extend the restriction/ban if conditions warrant. When this occurs, existing permits are canceled and new permits will not be issued. In addition, all open burning may be prohibited depending on the fire danger.

#### I. Responsibility of the Permit Holder to Control Fire

It is the responsibility of the permit holder to have at his/her disposal the necessary equipment and resources to contain and control any fire set in accordance with this Ordinance.

### **Section 10. General Responsibility and Liability/Negligent Handling of any Materials That Might Cause a Forest Fire.**

General responsibility and liability lies with the permittee, and any person who starts, kindles, or otherwise encourages a forest fire through the careless use of smoking materials, fireworks, campfires, motorized equipment, flammable substances, or any other material or item of equipment, or other means shall be in violation of this Ordinance.

### **Section 11. Enforcement/Evidence**

Violators of any provision of this Ordinance may be cited by any Law Enforcement Officer of a recognized jurisdiction and ordered to appear in Tribal Court.

1. The above-mentioned Law Enforcement Officers may issue immediate cease and desist orders for suspected violations, when a fire poses a nuisance, or when burning appears to create an unsafe condition. Such cease and desist orders may be issued regardless of whether a permit has been issued or whether a citation has been issued. The cease and desist order shall expire within 36 hours of issuance if a citation is not issued.
2. The above mentioned Law Enforcement Officers are authorized to enter private property, tribal, trust, allotted, or leased property at all times to inspect all outdoor fires.
3. Citations for violations shall include, but not be limited to the following: an affidavit by the above mentioned Law Enforcement Officers stating the conditions occurring during the burn or the manner of material being burned; or photographs/videos of the burn site and

material being burned when accompanied by an affidavit describing the date, time, location of the fire, the ownership, if known, of the barrel/open burning site, and any other relevant conditions.

4. Any authorized law enforcement officer, fire warden, or DRM designated inspector can order an immediate permanent or temporary stop to burning or may limit the conditions for the continuation of the burn.

### **Section 12. Tribal Court - Jurisdiction/Penalties**

Individuals who are cited for violations of this Ordinance shall be issued a citation ordering them to appear before a Judge of the Leech Lake Tribal Court.

### **Section 13. Effective Date and Severability**

Effective Date. This Ordinance shall be effective upon the date of adoption by resolution of the Leech Lake Tribal Council.

Severability :

a. General application. If any court of competent jurisdiction shall adjudge any provision of this ordinance to be invalid, such judgment shall not affect any other provision of this ordinance not specifically included in said judgment.

b. Specific application. If any court of competent jurisdiction shall adjudge invalid the application of any provision of this ordinance to a particular property, use, building, or other structure, such judgment shall not affect the application of said provision to any other property, use, building or other structure not specifically included in said judgment.

### **CERTIFICATION**

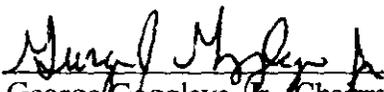
We do hereby certify that the foregoing Leech Lake Ordinance entitled "Open Burning, Burn

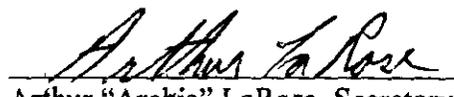
Barrel, and Fire Prevention Ordinance" was duly presented and adopted by a vote of   4  

For,   0   Against, and   0   Silent, at   a Special  

meeting of the Leech Lake Tribal Council, a quorum being present, held on   February 23  ,

2006 at   Cass Lake   Minnesota.

  
George Goggeye, Jr., Chairman  
LEECH LAKE TRIBAL COUNCIL

  
Arthur "Archie" LaRose, Secretary/Treasurer  
LEECH LAKE TRIBAL COUNCIL



## LEECH LAKE BAND OF OJIBWE OPEN BURNING FINE BAIL SCHEDULE

The following shall constitute the fine schedule for violations of the Leech Lake Open Burning, Burn Barrel and Fire Prevention Ordinance.

VIOLATION	SECTION	FINE AMOUNT
Burning prohibited materials	7(a-t)	\$250.00
Open burning/burn barrel without a permit	6.1 6.2	100.00
Use of unauthorized incinerator		250.00
Unattended fire	6.1(b)	250.00
Failure to extinguish campfire or open burn	6.1(c)	50.00
Failure to prevent a fire from spreading	6.1(a)	100.00
Failure to provide equipment for extinguishing a fire	9.1	50.00
Failure to comply with terms and conditions of valid permit or approved burn plan or have permit on your person	9.A.2 9.A.3	50.00
Allowing a fire to smolder	6.1(c)	50.00
Burning during a burning ban	6.1(q)	250.00
Careless or negligence resulting in fire or spread of a permitted fire	6.1(a)	\$150.00

The Court shall have discretion to increase the usual and customary fines based upon severity of damage, risk of harm to persons or property, and repeat offenses.

Dated: 3/10/06

Korey Wahwassuck  
Korey Wahwassuck, Chief Judge

LEECH LAKE BAND OF OJIBWE  
OPEN BURNING FINE BAIL SCHEDULE

The following shall constitute the fine schedule for violations of the Leech Lake Open Burning, Burn Barrel, and Fire Prevention Ordinance.

<u>VIOLATION</u>	<u>FINE AMOUNT</u>
Burning prohibited materials	\$250
Open burning/burn barrel without a permit	\$100
Use of unauthorized incinerator	\$250
Unattended fire	\$250
Failure to extinguish campfire or open burn	\$50
Failure to prevent a fire from spreading	\$100
Failure to provide equipment for extinguishing a fire	\$50
Failure to comply with terms and conditions of a valid permit or approved burn plan or have permit on your person	\$50
Allowing a fire to smolder	\$50
Burning during a burning ban	\$250
Careless or negligent resulting in a fire or spread of a permitted fire	\$150

The Court shall have discretion to increase the usual and customary fines based upon severity of damage, risk of harm to persons or property, and repeat offenses.

Dated: 3/3/06

Kay Wahwasank  
, Chief Judge

## *MEMORANDUM*

TO            Leech Lake Legal Department  
              Leech Lake Tribal Courts  
              Leech Lake Conservation Officers  
              Leech Lake Department of Public Safety  
              Rich Robinson, DRM Director

FROM        Brandy Toft, Air Quality Specialist



DATE        March 6, 2006

RE            Open Burning, Burn Barrel, and Fire Prevention Ordinance

Enclosed you will find a copy of the recently passed Open Burning, Burn Barrel, and Fire Prevention Ordinance, accompanying Resolution, and other support documentation. The ordinance was structured similar to the State of Minnesota language with a few differences. Leech Lake will be certifying and permitting burn barrels at a cost of \$50 per year. Please review the last page of the ordinance containing the fee schedule, as the fines for illegal actions concerning open burning are different from the State's fines. The Leech Lake Division of Resource Management will be issuing burn barrel certifications, burn barrel permits, and special permits. Individual, three-day permits for open burning can be obtained at fire warden stations located across the Reservation (a list can be provided).

With your help we can reduce the occurrence of burning household garbage, a major contributor to air pollution in our area. We propose to work with the Brownfield's Program, the Solid Waste Department, and the enforcement agencies to prevent dumping, increase awareness of our solid waste issues, and provide better services to the Leech Lake communities.

If you have any questions please contact me at 7429 or [air@lldrm.org](mailto:air@lldrm.org).



# Leech Lake Band of Ojibwe

*George Goggeye, Jr., Chairman*  
*Archie LaRose, Secretary/Treasurer*

District I Representative      District II Representative      District III Representative  
*Burton "Luke" Wilson*      *Lymon L. Losh*      *Donald "Mick" Finn*

115 6<sup>th</sup> Street NW, Suite E, Cass Lake, MN 56633  
(218) 335-8200 \* Fax (218) 335-8309

## MEMORANDUM

TO: Tribal Council  
FROM: Brandy Toft, Air Quality Specialist   
CONCURRENCE: Rich Robinson, DRM Director  
RE: Open Burning, Burn Barrel, and Fire Prevention Ordinance  
DATE: February 21, 2006

In the EPA 103 Air Quality Grant workplan, the Leech Lake Air Program identified burn barrels as a significant source of pollution to the Leech Lake Reservation, its residents, and its resources. In an effort to reduce and hopefully eliminate this unnecessary local pollution source, the Air Program identified that outreach to the local community and the revision of the previous Open Burning Ordinance and Permitting Requirements (98-02) was required.

Tribal Council passed the Open Burning Ordinance and Permitting Requirements in 1998. Since then language and perceptions have changed and warranted updated, more descript wording. We added a burn barrel section that requires the user to receive certification of their barrel, obtain a permit, and to pay a usage fee. Along with outreach, this is an effort to curb the use of burn barrels for the disposal of household waste. Burning household waste has been illegal in the State of Minnesota since 1969. To put burn barrel emissions into perspective, one pound of household waste burned in a burn barrel equals the emissions from burning one TON of household waste at an incinerator. Liability is also a concern with burn barrels and open burning in general as 40% of Minnesota wildfires are caused by careless debris burning. (This Spring the Air Program will be operating a burn barrel exchange program where one can turn in their burn barrel and ashes for two recycling bins.)

In an effort to minimize the confusion concerning open burning, the Leech Lake Open Burning, Burn Barrel, and Fire Prevention Ordinance was structured to use language that is similar to the State of Minnesota's rules and regulations. However, we are more stringent concerning the permitting of burn barrels, enforcement, and the ordinance's fee schedule for all aspects of open burning to highlight a few key points.

As a courtesy, we have extended the review of the Ordinance to the State of Minnesota and the US Forest Service. Both agencies had minor comments and support the Ordinance with the State acclaiming the Ordinance as setting a positive precedent for burn barrel control.

**LEECH LAKE BAND OF OJIBWE**  
**TRIBAL COUNCIL AGENDA ITEM REQUEST**

Date Submitted: 2-15-06 Meeting Date: \_\_\_\_\_

Division and Program: DRM - Air Program

Division Director Signature: [Signature]

Subject: Open Burning, Buen Barrel, & Fire Prevention Ordinance

Executive Summary:  
Amendment to 98-02 Open Burning Restrictions & Permitting Requirements  
Changes made to reflect updated language and new  
issue ie: buen barrels

Type of Action:

- RESOLUTION
- INFORMATIONAL
- APPROVAL
- NO ACTION NECESSARY
- OTHER (explain)

*In the event that the Division Director is unable to attend a delegate must be sent to the meeting.*

Date Received by Administration: \_\_\_\_\_

Deputy Director Signature: \_\_\_\_\_

Accounting Signature: N/A  
(required on budget agenda items)

Council Action: \_\_\_\_\_

Following each meeting Sharon Brown will return copies indicating action to:

Deputy Director	Date Sent: <u>6/11/06</u>
Division Director	Date Sent: _____
Accounting (if required)	Date Sent: _____

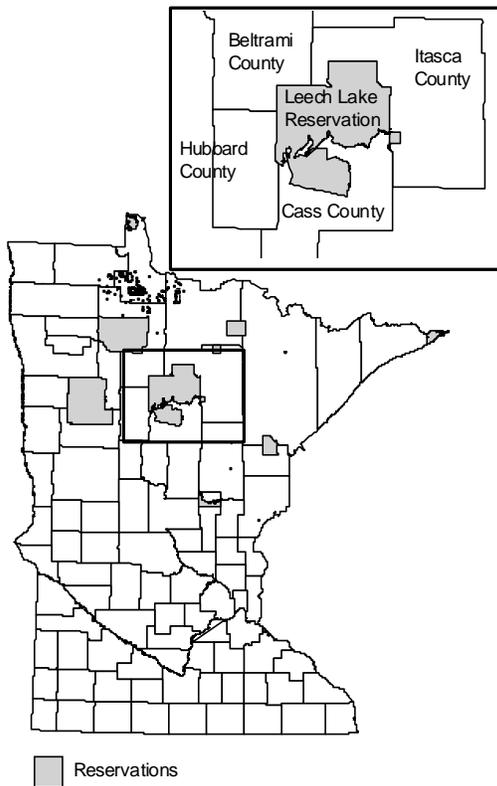
*Division Directors may reformat this form provided all of the information is included.*

**February 2014**

**American Indians,  
Indian Tribes, and State  
Government**

**Research Department**  
Minnesota House of Representatives

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# Leech Lake

## Minnesota Chippewa Tribe Member

115 Sixth Street NW  
Cass Lake, MN 56633  
218-335-8200  
218-335-8309 (Fax)  
[www.llojibwe.com](http://www.llojibwe.com)

**Adjacent Counties:** Beltrami, Cass, Hubbard, and Itasca counties

**Nearby Cities:** Bemidji, Deer River, Grand Rapids, Walker

**Tribal Enrollment (2013):** 9,378

**Tribal Land:** 14,855.02 acres

**Individual Land:** 12,252.11 acres

**Government Land:** 140 acres

**Casinos:** Northern Lights Casino  
6800 Y Frontage Road NW  
Walker, MN 56484  
800-252-7529

White Oak Casino  
45830 U.S. Highway 2  
Deer River, MN 56636  
800-653-2412  
[www.whiteoakcasino.com](http://www.whiteoakcasino.com)

Palace Casino Hotel  
6280 Upper Cass Frontage Road NW  
Cass Lake, MN 56633  
877-972-5223

**Top Three Industries on Reservation:** Education, health, and social services (24.4 percent); arts, entertainment, recreation, accommodation, and food services (23.1 percent); retail trade (9.7 percent)

**Tribal College:**  
Leech Lake Tribal College  
Cass Lake (Cass County)

**Tribal Governance:** Governed by five-member Reservation Business Committee (commonly referred to as Reservation Tribal Council), composed of a tribal chair, secretary/treasurer, and three regional representatives.

***Tribal Chairwoman (Term expires June 30, 2016):***

Carri Jones  
 218-335-8200  
 carri.jones@llbo.org

**Demographics of Leech Lake Reservation and Surrounding Areas**

**Population**

	<b>Population</b>	<b>Individuals Identifying as American Indian Alone or in Combination</b>	<b>% of Population Identifying as American Indian</b>	<b>% of Statewide American Indian Population</b>
<b>Leech Lake</b>	10,666	5,124	48.0%	5.0%
<b>Adjacent Counties</b>	138,495	16,771	16.5%	16.5%
<b>State</b>	5,303,925	101,900	1.9%	100.0%

**Age**

	<b>% Population Under Age 18</b>	<b>% Population Age 18 to 64</b>	<b>% Population Age 65 and Over</b>
<b>Leech Lake</b>	27.8%	56.7%	15.5%
<b>Adjacent Counties</b>	22.8%	59.4%	17.8%
<b>State</b>	24.2%	62.9%	12.9%

**Income**

	<b>Median Household Income</b>	<b>Per Capita Income</b>	<b>% Individuals in Poverty Status (last 12 months)</b>	<b>% Receiving Public Assistance (last 12 months)</b>
<b>Leech Lake</b>	\$37,196	\$19,225	22.7%	9.3%
<b>Adjacent Counties</b>	\$44,968	\$23,865	14.9%	4.8%
<b>State</b>	\$58,476	\$30,310	11.0%	3.3%

**Labor**

	<b>% Population Age 16 and Over in Civilian Labor Force</b>	<b>% Labor Force Employed</b>	<b>% Labor Force Unemployed</b>
<b>Leech Lake</b>	58.4%	50.7%	7.7%
<b>Adjacent Counties</b>	61.2%	55.5%	5.7%
<b>State</b>	70.8%	93.1%	6.9%

**Education**

	<b>% Population Age 25 and Over – No High School Diploma</b>	<b>% Population Age 25 and Over – High School Graduate Only</b>	<b>% Population Age 25 and Over – Some College or Associate Degree</b>	<b>% Population Age 25 and Over – Bachelor's or Graduate Degree</b>
<b>Leech Lake</b>	11.2%	34.9%	35.8%	18.1%
<b>Adjacent Counties</b>	9.1%	32.2%	35.3%	23.4%
<b>State</b>	8.4%	27.5%	32.3%	31.8%

# **Natural Wild Rice In Minnesota**

**A Wild Rice Study document submitted to  
the Minnesota Legislature by the Minnesota  
Department of Natural Resources  
February 15, 2008**



# Executive Summary

## Introduction

This report fulfills the requirements of Session Law 2007, Chapter 57, Article 1, Section 163 requiring the Commissioner of Natural Resources to prepare a study for natural wild rice that includes: (1) the current location and estimated acreage and area of natural stands; (2) potential threats to natural stands, including, but not limited to, development pressure, water levels, pollution, invasive species, and genetically engineered strains; and (3) recommendations to the house and senate committees with jurisdiction over natural resources on protecting and increasing natural wild rice stands in the state.

In fulfilling these requirements, the Minnesota Department of Natural Resources (MNDNR) established a Technical Team of wild rice experts from State, Tribal, and Federal governments, as well as academia and the private sector. The MNDNR also established a Partnership Team representing major stakeholders.

## Importance of Natural Wild Rice

Nowhere has natural wild rice been more important, nor had a richer history, than in Minnesota. No other native Minnesota plant approaches the level of cultural, ecological, and economic values embodied by this species. Natural wild rice has been hand harvested as a source of food in the Great Lakes region for thousands of years.

The Ojibwe people have a special cultural and spiritual tie to natural wild rice. Known to their people as Manoomin, it is revered as a special gift from the Creator. In addition many immigrants to Minnesota adopted hand harvesting of natural wild rice as an annual ritual. Annual sales of state licenses for wild rice harvesting peaked in 1968 at over 16,000. In recent years, annual sales have averaged fewer than 1500. In many instances, though, tribal harvesters are not required to buy state licenses. It is thought that more than 3000 tribal members participate in wild rice harvesting, providing a statewide total (tribal and nontribal) of 4000-5000 individuals annually.

The value of natural wild rice to wildlife has been long appreciated by American Indians and was marveled at by early European explorers. Research since then has documented that wild rice provides food and shelter for many fish and wildlife species. It is one of the most important foods for waterfowl in North America. More than 17 species of wildlife listed in the MNDNR's Comprehensive Wildlife Conservation Strategy as "species of greatest conservation need" use wild rice lakes as habitat for reproduction or foraging.

Wild rice harvest has provided important economic benefits to local economies. As with other commodities, the price paid for unprocessed natural wild rice can vary considerably. Although pricing is mainly determined by supply, marketing also plays a role. During the past 70 years, the price of one pound of unprocessed wild rice has ranged from \$0.10 in 1940 to \$2.17 in 1966. Adjusted for inflation these prices in today's dollars are equivalent to \$0.75 and \$13 per pound, respectively. As an example, the 1966 harvest of 924,000 lbs would have been worth over \$12 million today.

Prior to 1970, Minnesota provided half of the global market supply of wild rice. Most of this rice was from hand harvested natural stands. By 1990, the large-scale production of cultivated wild rice had expanded, and natural wild rice accounted for less than 10% of the global market supply. The total annual yield of cultivated and hand harvested wild rice in Minnesota today ranges from four to eight million pounds. A recent MNDNR survey found the average annual hand harvest of natural stands to be 430 pounds per individual.

## **Background**

Although stands of natural wild rice occur most commonly in central and north-central Minnesota, the historic range of wild rice included all of the state. Based on the inventory conducted for this report, the range of natural wild rice today includes 55 counties in Minnesota. Stands of natural wild rice were present or occurred in recent history on approximately 1286 lakes and river/stream segments. These areas support a minimum of 64,328 acres of natural wild rice when growing conditions are favorable.

The greatest concentration of lakes supporting natural wild rice is in Aitkin (4,859 acres), Cass (8,323 acres), Crow Wing (3,751 acres), Itasca (8,448 acres), and St. Louis (8,939 acres) counties. These counties contain over 60% of the inventoried natural wild rice acreage in Minnesota. These counties also account for over 70% of the harvesting trips for natural wild rice.

Natural wild rice generally requires some moving water, with rivers, flowages, and lakes with inlets and outlets being optimal areas for growth. Wild rice grows well at depths of 0.5 to 3 feet of water, although some plants may be found in deeper waters. As an annual plant, natural wild rice develops each spring from seeds that fell into the water during a previous fall. Germination requires a dormancy period of three to four months of cold, nearly freezing water (35° F or colder). Seeds are unlikely to survive prolonged dry conditions.

The entire process, from germination of a new plant to dropping of mature seeds, requires about 110 to 130 days, depending on temperature and other environmental factors. Seeds begin ripening at the top of the stem and then ripen over several days on an individual plant. Plants within a stand ripen at different times because of genetic, developmental, and environmental variation. This staggered maturation process means that ripe seeds may be available within individual stands for several weeks, and across the entire range of natural wild rice in Minnesota for a month or longer.

The earliest laws and regulations concerning wild rice in Minnesota focused on wild rice harvest and date back more than 75 years. Today, there is a complex mix of tribal, federal, state, and local laws and regulations. These are associated with the formal recognition of the significance of natural wild rice and its protection, management, and harvest. The application of regulations varies by jurisdiction (i.e., tribal versus state) and geography (i.e., on-reservation versus off-reservation, or within various ceded territories). Regulatory authority governing different aspects of wild rice management occurs within several state agencies yet within state statutes there is no unifying policy to provide overall guidance in implementation.

## **Threats**

Despite its rich history and abundance in Minnesota, natural wild rice faces many current and potential threats in this region. In general, any factor that can affect water quality, seasonal water levels, lakebed conditions, regional climate, aquatic vegetation, or the natural genetic diversity of wild rice could potentially threaten natural stands. These threats may work in concert or individually to damage wild rice stands.

Important threats that impact local stands of natural wild rice include changes in local hydrology due to dams and channelization, water-based recreation and shoreland development, and mining and other industrial activities. Although the impacts are to local stands, the cumulative effect of these threats can have statewide implications. Hydrological impacts and shoreland development are particularly important.

On a statewide and regional scale, the most important threats are the potential loss of genetic integrity, invasive species, and climate change. Nearly all of the concern expressed about wild rice genetics focuses on the potential of genetic engineering. Invasive species are an ongoing statewide issue impacting aquatic systems in general. Climate change has the potential for the greatest long-term impacts on natural wild rice.

As citizens become more distant from positive experiences with natural wild rice through harvesting, hunting, trapping, or wildlife watching, they are less likely to recognize the very real impacts that the previously noted threats could have on natural wild rice in Minnesota. This loss of appreciation, while not a direct threat to the wild rice resource, nevertheless increases the risks because the level of resource protection and management is often based on the perceived value of a resource.

Unfortunately wild rice harvesters are relatively few in number and have experienced a long-term decline, although the number of tribal harvesters has rebounded in recent years. Only about 4000-5000 people participate in hand harvesting natural stands of wild rice annually.

The future of natural wild rice in Minnesota will depend in large part on its protection and management by state and tribal natural resource agencies. The role of the agencies is complicated by the limitations of their authority and the challenges posed by multiple jurisdictions, annual variability of wild rice crops due to weather and other factors, and lack of information concerning the natural ecology of wild rice, historical losses, trends in abundance and distribution, threats to its future, and a better understanding of wild rice harvesters.

## **Recommendations**

The following recommendations were developed with valuable input and discussion from the members of the Wild Rice Study Technical Team and Partnership Team. However, the MNDNR assumes sole responsibility for these recommendations as written and presented here.

MNDNR recognizes the importance of protecting natural wild rice beds from genetic modification and agrees with wild rice stakeholders that this protection is critical to the future of this resource. We strongly support the Minnesota Environmental Quality Board in adopting rules

that require an Environmental Impact Statement for a proposed release of genetically engineered wild rice (MS 116C.94 Subd.1b).

**Recommendation 1**

**Recodify current wild rice harvest statutes and rules to remove duplication and inconsistencies.**

**Rationale:** The state's wild rice statutes and rules have been developed and modified piecemeal over a long period of time. As a result they contain a number of inconsistencies and duplication.

**Recommendation 2**

**Establish statutory policy guidance on wild rice and its management.**

**Rationale:** Within state statutes there is no unifying policy that provides direction to agencies responsible for some aspect of wild rice management.

**Recommendation 3**

**The MNDNR will convene an interagency workgroup in 2008 to identify desired statutory updates in harvest regulations.**

**Rationale:** Harvest regulations and license fee structure should be reviewed by an interagency work group for suggested changes.

**Recommendation 4**

**The MNDNR will designate and publish a list of important natural wild rice areas.**

**Rationale:** Recognizing important wild rice areas and publishing the list would call attention to the importance of these areas, indicate management priorities, and provide a formal list that may prove useful for local units of government that are considering zoning and surface use restrictions.

**Recommendation 5**

**The MNDNR will convene a standing interagency wild rice workgroup to share information and develop recommendations for inventory methodology and trend assessments, education and information outreach, lake planning and management, harvester recruitment and retention, and other management issues as they arise.**

**Rationale:** Comprehensive protection and management of wild rice involves multiple agencies. Management needs include better inventory information including consistent methodology for trend analysis, documenting natural genetic diversity, and establishing long-term case studies on identified lakes.

**Recommendation 6**

**Increase intensive natural wild rice lake management efforts and accelerate the restoration of wild rice stands within its historic range.**

**Rationale:** Protecting and managing natural wild rice resources on many lakes requires active annual management activities to maintain free flowing outlets. Active management is also required to restore wild rice to wildlife habitat areas within its historic range. These efforts should be accelerated as funding, time, and opportunity permit.

## ***Sacred Food and Medicine***

*Wild rice, or manoomin, is a sacred food and medicine integral to the religion, culture, livelihood, and identity of the Anishinaabeg. According to our sacred migration story, in the long ago a prophet at the third of seven fires beheld a vision from the Creator calling the Anishinaabe to move west (to a land previously occupied long ago) until they found the place “where food grows on the water.” The Anishinaabeg of the upper Mississippi and western Great Lakes have for generations understood their connection to anishinaabe akiing (the land of the people) in terms of the presence of this plant as a gift from the Creator. In the words of White Earth’s Tribal Historian, Andy Favorite, “Wild rice is part of our prophecy, our process of being human, our process of being Anishinaabe ... we are here because of the wild rice. We are living a prophecy fulfilled.”*

*In our Ojibwe language, manoomin is animate, grammatically referred to as “him/her” not “it,” a non-human being, not just an inanimate “resource.” It is both difficult and of utmost importance to adequately translate and appreciate this worldview in the language of mainstream culture and society with its scientific advisory boards for the study of humans and animals but not plants. According to Anishinaabe author, Basil Johnson, “...in essence each plant ... was a composite being, possessing an incorporeal substance, its own unique soul-spirit. It was the vitalizing substance that gave to its physical form growth, and self-healing.” The Anishinaabeg believe that wild rice will always grow where they live. Menominee chief Chieg Nio’pet said his people did not need to sow rice because it would follow them wherever they went. He told of how Shawano Lake never had manoomin until the Menominee moved there. Similarly when they were banned from Lake Winnebago, the rice that had been plentiful there all but disappeared. Whatever happens to the land and to manoomin happens to the Anishinaabe.*

*Our ceremonies and aadizookanag -sacred stories- also tell of our people’s relations with this plant. White Earth Anishinaabe, Joe LaGarde, notes that wild rice and water are the only two things required at every ceremony. Manoomin accompanies our celebrations, mourning, initiations, and feasts, as both a food and a spiritual presence. It holds special significance in traditional stories, which are only told during ricing time or when the ground is frozen. “In these stories, wild rice is a crucial element in the realm of the supernaturals and in their interactions with animals and humans; these legends explain the origin of wild rice and recount its discovery...” by Wenabozhoo, or Nanabozho, the principal manidoo or spirit in our sacred aadizookanag.*

*Manoomin is just as central to our future survival as our past. While we try to overcome tremendous obstacles to our collective health, the sacred food of manoomin is both food and medicine. “Wild rice is consequently a very special gift, with medicinal as well as nutritional values—belief reflected in the Ojibwe use of wild rice as a food to promote recovery from sickness as well as for ceremonial purposes.” (Vennum 62). Manoomin is inextricably bound to the religion and identity of the Anishinaabeg. This is why these threats are potentially so devastating and why it is essential that the sanctity and integrity of this plant be preserved. If artificially produced or engineered varieties of wild rice were to compromise the wild manoomin that has existed in the lakes for thousands of years, it will compromise the Anishinaabe people and our way of life. Joe LaGarde puts it plainly, “If we lose our rice, we won’t exist as a people for long. We’ll be done too.”*

*Erma Vizenor, Tribal Chairwoman, White Earth Nation  
With the participation of Carlton College Students.*

**Tribal Statement Regarding MNDNR Wild Rice Study  
Submitted To the State Legislature February 15, 2008**

We appreciate the opportunity to provide input into the development of this *Natural Wild Rice in Minnesota* report. Manoomin (wild rice) is a remarkable and valuable component of the Minnesota landscape, and it is commendable that the State is concerned with its future. We concur with most of the wild rice history, ecology and proposed management recommendations contained therein and offer our statements below as points for emphasis and clarity to the Legislature and State DNR.

Manoomin is an inherent part of being Ojibwe. Our lifestyles and cultural identity are intimately bound to manoomin, spiritually, physically and economically. The importance of manoomin to the Ojibwe people cannot be overstated as it holds a central position in the lives and rich history of the Ojibwe people. It is more than just another grain or crop; it is a cultural resource of indescribable importance. It is a sacred gift from the creator to our people and is used for sustenance, ceremonial and commercial purposes.

The right of the Ojibwe to harvest and use manoomin was reserved and guaranteed in treaties signed between the Chippewa Bands of the region and the federal government that predate Minnesota statehood. Recent Supreme Court rulings have upheld the existence of these treaty reserved rights along with the federal trust responsibility to uphold these rights, and resources they are built upon.<sup>1</sup> Today, Tribal members continue to harvest manoomin, as they have for many years, in numbers greater than the rest of the state population. The very existence of the Ojibwe people depends on the vitality of their environment, their resource use and their culture which is intricately connected to natural wild rice.

Science and technology in the world is rapidly changing and challenging the environment of our daily lives. Threats to the existence and integrity of natural stands of wild rice are of immense concern to the Ojibwe. Today, the thought of genetic modification of wild rice poses an alarming threat into the possibility of irreversible genetic contamination of our natural stands of wild rice. This would have a profound negative impact on the Ojibwe people. The connection between Ojibwe culture and wild rice is not a static concept and should not be viewed as such. Rather, our relationship to wild rice should be acknowledged as a respectful, living force that guides the growth and development of our Ojibwe communities, as it has for centuries.

We feel strongly that manoomin must be protected from genetic engineering. From the beginning of the genetic engineering debate in Minnesota, the tribes have wanted GE wild rice banned. For the Ojibwe, no level of contamination is acceptable. Once genetic contamination occurs, there is likely no way to reverse it. There are published documents and reports demonstrating that genetically engineered plants can escape test plots and intermingle with native populations at distances greater than was previously thought. These same studies have shown that the range of impacts on native populations is significantly greater than currently recognized.<sup>2</sup> Thus, if GE wild rice were to be grown in Minnesota, it is not a question of whether contamination will occur rather, it is a question of how quickly and to what extent contamination will occur.

We recognize and appreciate that the current statute requiring an Environmental Impact Statement prior to any proposed release of GE wild rice represents progress. However, we desire complete and permanent protection for manoomin. There are currently no proven safe guards that could effectively isolate GE strains of wild rice from natural stands. The only way to prevent genetic contamination is to ensure that no GE wild rice is released into the environment. A ban on genetically engineered rice in Minnesota would be the best way to achieve this.

We recommend that the State Legislature require the Environmental Quality Board to specifically include Tribal cultural impacts as part of any GE wild rice Environmental Impact Statement process. Statements should include effects on the cultural practices of the Tribal community and State and address effects on Ojibwe culture, and traditional and customary rights.

We can not afford to hesitate when it comes to protecting natural stands of wild rice. We must conserve the biodiversity of natural wild rice stands. The rapid development of new technology and science combined with corporate exploitation of resources adds to the urgency. We must not allow Minnesota manoomin to be genetically contaminated by genetically engineered varieties that may be developed. This resource is far too precious, far too significant ecologically, economically and culturally, and far too sacred to allow this to occur. The protection and preservation of natural bed wild rice needs to be the concern of all Minnesotans. We desire to work with the State of Minnesota to ensure that wild rice is protected fully and permanently.

Bois Forte Band of Chippewa  
Fond du Lac Band of Lake Superior Chippewa  
Grand Portage Band of Chippewa  
Leech Lake Band of Ojibwe  
Mille Lacs Band of Ojibwe  
White Earth Band of Ojibwe  
The Minnesota Chippewa Tribe  
1854 Treaty Authority  
Great Lakes Indian Fish and Wildlife Commission  
White Earth Land Recovery Project

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<sup>1</sup> None of the material in this report can be construed to abrogate, abridge, affect, modify, supersede or alter any treaty-reserved right or other sovereign rights of the regions Chippewa Bands' as recognized by any means, including but not limited to, agreements with the United States, Executive Orders, statutes, judicial decrees, or Federal law.

<sup>2</sup> The following references represent a small sample of the research on the uncertainty of the impact and fate of genetically engineered organisms on natural ecosystems: Schoen, DJ, Reichman JR, and Ellstrand, NC 2008. Transgene Escape Monitoring, Population Genetics, and the Law. *Bioscience* Vol. 58 No. 1: 71-77; Ponti, Luigi, 2005. Transgenic Crops and Sustainable Agriculture in the European Context, *Bulletin of Science Technology & Society* Vol. 25, No. 4: 289-305; Lundmark, C, 2007, Genetically Modified Maize, *Bioscience* Vol. 57, No. 11: 996.



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**LEECH LAKE BAND OF OJIBWE  
DIVISION OF RESOURCE MANAGEMENT  
115 6<sup>th</sup> ST. NW Suite E, Cass Lake, MN 56633**

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# LLDRM Wild Rice Report 2016

**Total Days Buying:** 8/24/16 thru 9/17/2016 = 25 Days

**Average of Daily LBS. Purchased:** 4,879.80 lbs

**Average Amount of Funds Spent Daily:** \$9,148.86

**Average Sales per day:** 31

**Average Amount per boat (Daily):** \$295.13 (Equivalent to a \$26.60 per hr. job)

## **Green Rice Sales:**

- ❖ 1194 lbs Private sales
- ❖ 5,218 lbs Fond du Lac DNR
- ❖ 5,000 lbs Red Lake DNR
- ❖ 1,500 lbs Prairie Island DNR
- ❖ 4,000 lbs Little Traverse Band DNR
- ❖ 3,754 lbs Keenaw Bay Band DNR
- ❖ 604 lbs Lower Sioux DNR

**Total** – 21,270 lbs x \$2.25 = \$47,857.50

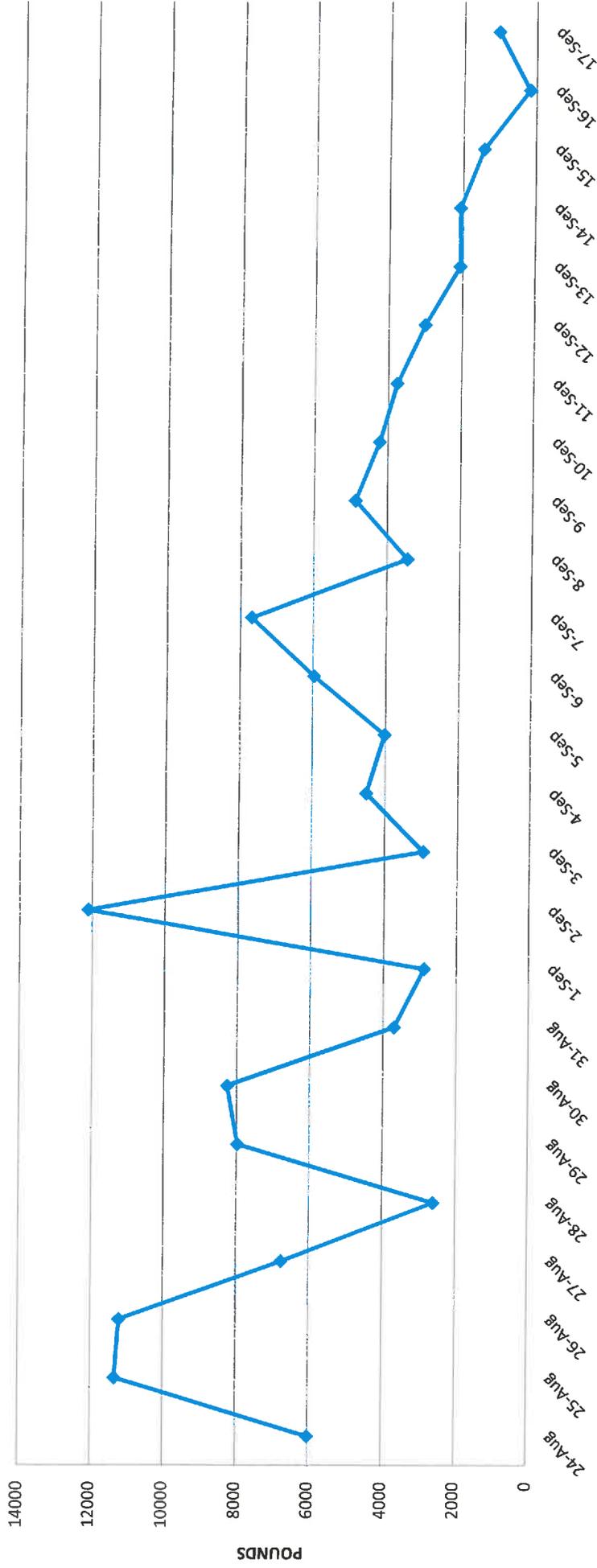
**Total Green Rice sent to Processor:** 101,969 lbs

**Total Green Rice Purchase:** 123,239 lbs

**Total Amount Spent:** \$231,209.50 - \$47,857.50 = \$183,352.00

**Conclusion:** We had a good year compared to other area in the region. We have had an increase of green rice sales from other DNR's throughout the region could be due to the fact that weather hurt other rice crops. We have seen a large decline in members selling their rice that is reflected in average sales per day which dropped by 20 sales per day or for entire year which was 500 sales transactions. MCT also purchased around 21,000lbs. during the early part of the season but that was not overly detrimental to our purchasing needs.

## Daily Purchased Pounds



Date	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep
Series1	6019	11321	11202	6752	2612	7972	8265	3696	2892	12102	2943	4506	4015	5957	7687	3438	4864	4222	3754	3006	2072	2080	1441	192	1052



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# LLDRM Wild Rice Report 2015

**Total Days Buying:** 25 Days

**Average of Daily LBS. Purchased:** 7,120 lbs

**Average Amount of Funds Spent Daily:** \$11,830.00

**Average Sales per day:** 52

**Average Amount per boat (Daily):** \$227.00 (Equivalent to a \$19.00 per hr. job)

## **Green Rice Sales:**

- ❖ 1436 lbs Private sales
- ❖ 3,000 lbs Stockbridge Munsee DNR
- ❖ 2,000 lbs Red Lake DNR
- ❖ 1,500 lbs Prairie Island DNR
- ❖ 3,500 lbs Little Traverse Band DNR
- ❖ 20,000 lbs Chris Retuski

Total – 11,436 lbs x \$2.00 = \$22,872.00  
20,000lbs. x \$1.70 = \$34,000.00

**Total Green Rice Purchase:** 178,016 lbs

**Total Amount Spent:** \$295,762 - \$56,872 = \$238,890

**Conclusion:** 2015 was a average year for pounds purchased but we had several people placed on the wall of shame for dirty rice or in one case no rice at all instead just hay. Also on the final day we had a influx of LLBO members attempting to sell rice for other individuals mostly white earth ricers. The Ricing Committee has mandated LLDRM to ensure we buy only from LLBO licensed ricers and that the rice belongs to them. In closing we had 51 youth participates at our Take a Kid Ricing event which is down from 2014 where we had 64 participates.





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# LLDRM Wild Rice Report 2014

**Total Days Buying:** 25 Days

**Average of Daily LBS. Purchased:** 2,718 lbs

**Average Amount of Funds Spent Daily:** \$5,436.00

**Average Amount per boat (Daily):** \$216.00 (Equivalent to a \$21.00 per hr. job)

## **Green Rice Sales:**

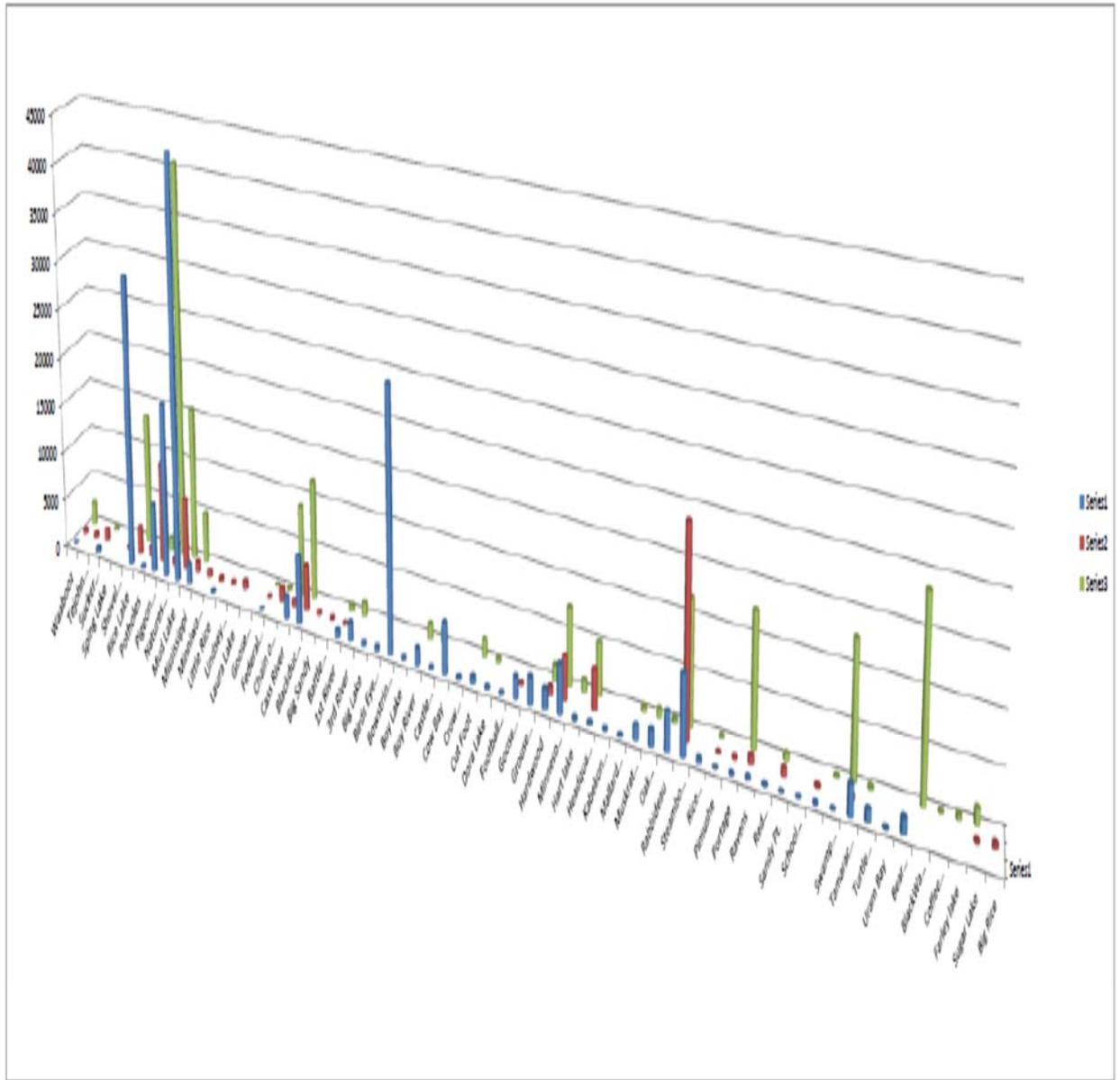
- ❖ 299 lbs Percy Lussier
- ❖ 3,000 lbs Stockbridge Munsee DNR
- ❖ 2,999 lbs Red Lake DNR
- ❖ 1,500 lbs Prairie Island DNR
- ❖ 2,500 lbs Little Traverse Band DNR
- ❖ 4,691 lbs Bruce Savage
- ❖ 6,789 lbs Chris Retuski
- ❖

Total – 21,878 lbs x \$2.00 = \$43,756

**Total Green Rice Purchase:** 67,937 lbs

**Total Amount Spent:** \$135,874 - \$43,756 = \$92,118

**Conclusion:** Only one minor issue: with 4 days left of buying a bag was discovered to have 16 pounds of rocks in it, all rocks were removed and reweight then proper check was cut. The 2014 season was steady and slow but with other reservations harvest amount being almost nothing we had a better season then most expected.





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# LLDRM Wild Rice Report 2013

**Total Days Buying:** 15 Days

**Average of Daily LBS. Purchased:** 12,220 lbs

**Average Amount of Funds Spent Daily:** \$18,333.00

**Average Amount per boat (Daily):** \$282.00 (Equivalent to a \$23.00 per hr. job)

## **Green Rice Sales:**

- ❖ 2,000 lbs Randy Beaulieu
- ❖ 3,000 lbs Stockbridge Munsee DNR
- ❖ 3,000 lbs Red Lake DNR
- ❖ 1,500 lbs Prairie Island DNR
- ❖ 2,500 lbs Little Traverse Band DNR

Total – 12,000 lbs x \$2.00 = \$24,000

**Total Green Rice Purchase:** 189,095 lbs

**Total Amount Spent:** \$283,642.50 - \$24,000 = \$259,642.50

**Conclusion:** Only one minor issue: 13 days into buying with only one hour left to buy we had a computer glitch which halted all buying for the day but all the sellers understood the issue and to help offset the problem we opened for buying the following day which was a Sunday. The 2013 season was good and with additional funds tribal harvesters could have picked an estimated 400,000 lbs.

## **2012 Green Sales:**

Bruce Savage- 5,121 lbs.

Hilda Beaulieu – 4,009 lbs.

Retuski – 45,824 lbs.



MINNESOTA CHIPPEWA TRIBE  
WATER RESEARCH LAB

RESEARCH REPORT NO. 47

1989

Research and preparation for this report was conducted by the staff of the Minnesota Chippewa Tribe's Water Research Laboratory. Please direct comments and questions to:

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Phone 218-335-6306.

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## EXECUTIVE SUMMARY

The Fond Du Lac chain of wild rice lakes may be managed as productive wild rice ecosystems if the lake levels and drainage systems are regulated within the seasonal time frames contained in this report. A critical management factor is that the drainage system needs to be opened early in the spring (March) before flood conditions are reached. Once flood conditions are present, it is nearly impossible to remove drainage obstructions such as beaver dams. These dams will greatly impede the flow of water and prolong the high water levels in the rice lakes. Of equal importance is to open the drainage system from the bottom up, moving from Pine Drive on the Stoney Brook up to Perch Lake.

Several of the lake gauges need to be reset to ensure that an accurate record can be kept. Drainage system volumes for the chain of lakes need to continue to be measured and a record kept. A new and larger culvert at the "Second Bridge" on the Ditchbank Road is recommended. The drainage water during the spring of 1989 was overflowing the culvert now in place, indicating that the culvert was impeding flow.

Water level control structures at the outlet of Perch Lake and Rice Portage Lake would enhance water level management throughout the chain of lakes drainage system.

Wild rice production has been measured by the MCT Research Lab on several Tribal rice lakes. Our data shows rice production of over 500 pounds per acre in lakes containing large rice kernels. Average rice production was generally found to be between 200 and 300 pounds per acre. An important factor is allowing the rice the longest possible growing season by achieving the proper water level management conditions (see specific water level recommendation, p.18 ).

The wild rice bed acreage on Perch Lake in 1989 was estimated to be 80 acres. The rice was patchy, and no rice plant density measurements were done. Competing aquatic plants, including the sedge Scirpus hudsonianus, are creating a problem for rice production. No documented eradication methods are known for this plant. Management techniques which may be beneficial include removing plants, cultivation of the lake bottom in areas where these plants are dense, and water level management.

# WILD RICE IN MINNESOTA

*John B. Moyle*

Bureau of Fisheries Research, Minnesota Department of Conservation, St. Paul, Minnesota

Wild rice (*Zizania aquatica*) is an aquatic grass of the Tribe Zizanieae which produces grain valued as food for waterfowl and as a table delicacy for mankind. It is a native plant and not the ancestor of the cultivated rice of commerce. Wild rice grows throughout the eastern half of the United States and adjoining portions of Canada (Hitchcock, 1935), but is more abundant in central and northern Minnesota than in other parts of its range. Minnesota wild rice stands are autumn feeding grounds for waterfowl on the Mississippi flyway. Martin and Uhler (1939) report that this rice formed 5.10 per cent of the food in the stomachs of many game ducks taken in the eastern United States, and Morse (1941) found it made more than 50 per cent of the food for wild ducks on some Minnesota lakes in autumn. Wild rice has long been gathered for food by the Minnesota Indians and at present is harvested in considerable amounts by both Indians and whites.

## ECOLOGY OF WILD RICE

Wild rice grows in shallow lakes and along streams in water 1 to 3 feet deep. The seeds, buried in the bottom mud since the preceding autumn, germinate in May and June to produce ribbon-like submerged leaves. By late June and July these leaves have grown to float on the water surface. The blossom stalks emerge during the first 2 weeks in July, and when a few inches above the surface begin to flower; the stalks continue

to grow until the grains are nearly mature. At the time of ripening, in late August and September, the "straw" extends 2 to 8 feet above the water. Each stalk produces a terminal panicle of unisexual spikelets—pistillate on the upper ascending branches and staminate on the lower spreading branches. The pistillate portion matures from the top downward and about 10 days are required for the ripening of all the seeds. Around each kernel is a hull of the persistent palea and awned lemma. When fully mature, the entire spikelet disarticulates from the pedicle, drops into the water, and settles into the bottom mud. Most wild rice plants have but one stalk with a terminal panicle or "head," but stooling may occur in shallow water when an individual plant will produce five or six stalks.

Wild rice usually grows in nearly pure stands. The lakes producing this crop show marked seasonal differences: in spring they are expanses of open water, in midsummer covered with a mat of floating leaves, and in late August and September resemble fields of cultivated grain. The vegetational complex of wild rice stands is essentially one of annual development. The aquatic plants usually associated with this grass begin growth each season from seeds, winter buds, or other types of propagules. Rooted perennials are uncommon. In Minnesota the most common aquatics associated with wild rice are bushy pondweed (*Najas flexilis*), coontail (*Ceratophyllum demersum*), duckweeds

(*Lemna minor*, *L. trisulca* and *Spirodela polyrhiza*), bladderwort (*Utricularia macrorhiza*), and a pondweed (*Potamogeton zosteriformis*). The bushy pondweed is especially abundant in some stands and, like the wild rice itself, is avidly eaten by waterfowl (Morse, 1941).

In Minnesota, the chemical nature of the water seems to be the principal factor affecting the natural distribution of wild rice. This crop tolerates the entire carbonate (total alkalinity) range of Minnesota waters (5 to 250 p.p.m.), but is intolerant of sulphates. No large stands of rice occur in waters having a  $SO_4$  content greater than 10 p.p.m., and rice generally is absent from water with more than 50 p.p.m. Best growth is made in carbonate waters having total alkalinity greater than 40 p.p.m. Most Minnesota wild rice stands are on mucky soils over gravel or sand. The crop grows best in lakes having some water moving through and often is lacking from stagnant lakes and pools, especially bog lakes with dark brown water. It is frequent along streams and at lake inlets and outlets.

#### THE CROP AND ITS HARVEST

Surveys in 1940-42 showed at least 15,000 acres of wild rice in stands of 5 acres or more; the total probably would approach 30,000 acres if all smaller stands were considered. The stands vary from small patches fringing lakes and creeks to nearly 1,000 acres in some large shallow lakes; about 150 are large enough to warrant harvesting. The principal stands of more than 500 acres each are in Nett Lake, Koochiching County; Upper and Lower Rice lakes, Clearwater County; Star Lake, Otter-

tail County; Lake Minnewawa, Aitkin County; and Big Rice Lake, Cass County.

The Minnesota harvest (calculated from returns by about 10 per cent of the harvesters), was 1,586,000 pounds, or 793 tons of parched or processed grain, in the bumper crop of 1940. In 1941 only 20,000 pounds were taken but in 1942 the harvest was 337,000 pounds, about 75 per cent of normal (estimated annual production of processed rice about 500,000 pounds). The poundage of non-processed grain was 2.5 times the foregoing figures. In 1940, 2,500 persons were engaged in the harvest. In most years the grain has a gross sales value between \$100,000 and \$400,000. The price paid on the stands for non-processed rice in 1940 to 1943, was 5 to 12 cents a pound. During the same period processed rice brought 20 to 40 cents a pound on the stands and retailed in Minnesota at 40 to 60 cents per pound. In addition to the processed rice sold for table use, considerable amounts of non-processed grain are purchased by aquatic nurseries and sold to sportsmen for planting as a waterfowl attraction.

#### HISTORY OF RICE HARVEST

Wild rice has long been harvested by the Minnesota Indians and prior to the coming of the white man was one of their staple foods. Before 1800, most of the stands were controlled by the Sioux; the Chippewas, now the bulk of the state's Indian population, then inhabited only the north shore of Lake Superior. The earlier and more general use of firearms by the Chippewas and the pressure of white settlement on both tribes, allowed the Chippewas to gain control of most of the wild rice be-

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# Heavy metals in wild rice from Northern Wisconsin

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## Heavy metals in wild rice from northern Wisconsin

James P. Bennett<sup>a,\*</sup>, Esteban Chiriboga<sup>b</sup>, John Coleman<sup>b</sup>,  
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Accepted 7 November 1999

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### Abstract

Wild rice grain samples from various parts of the world have been found to have elevated concentrations of heavy metals, raising concern for potential effects on human health. It was hypothesized that wild rice from north-central Wisconsin could potentially have elevated concentrations of some heavy metals because of possible exposure to these elements from the atmosphere or from water and sediments. In addition, no studies of heavy metals in wild rice from Wisconsin had been performed, and a baseline study was needed for future comparisons. Wild rice plants were collected from four areas in Bayfield, Forest, Langlade, Oneida, Sawyer and Wood Counties in September, 1997 and 1998 and divided into four plant parts for elemental analyses: roots, stems, leaves and seeds. A total of 194 samples from 51 plants were analyzed across the localities, with an average of 49 samples per part depending on the element. Samples were cleaned of soil, wet digested, and analyzed by ICP for Ag, As, Cd, Cr, Cu, Hg, Mg, Pb, Se and Zn. Roots contained the highest concentrations of Ag, As, Cd, Cr, Hg, Pb, and Se. Copper was highest in both roots and seeds, while Zn was highest just in seeds. Magnesium was highest in leaves. Seed baseline ranges for the 10 elements were established using the 95% confidence intervals of the medians. Wild rice plants from northern Wisconsin had normal levels of the nutritional elements Cu, Mg and Zn in the seeds. Silver, Cd, Hg, Cr, and Se were very low in concentration or within normal limits for food plants. Arsenic and Pb, however, were elevated and could pose a problem for human health. The pathway for As, Hg and Pb to the plants could be atmospheric. © 2000 Elsevier Science B.V. All rights reserved.

**Keywords:** Wild rice; Heavy metals; Wisconsin; Arsenic; Partitioning

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## 1. Introduction

Wild rice, *Zizania aquatica* L., is more nutritious than many cereal grains, including white rice, *Oryza sativa* (Anderson, 1976). It is a staple in the diet of native peoples in the north-central United States and Canada, where it grows as an emergent, aquatic plant. Concern has been raised about possible contamination of the crop by heavy metals because of this (Pip, 1993; Nriagu and Lin, 1995). Wild rice may inadvertently be harvested from areas of water pollution or in water bodies that extract heavy metals from the earth. In addition, if harvested proximate to an airborne source, wild rice could accumulate heavy metals from the atmosphere thus, complicating the picture.

Moderately elevated levels of Pb, Cd, and As were found in store-bought wild rice in the US (Nriagu and Lin, 1995), but also high concentrations of Fe, Cu and Zn, which add to the nutritional value of the grain. Similarly, Pip (1993) also found elevated Pb and Cu in wild rice sold in Canada. Both these studies used grain bought directly in stores, not seed from plants sampled in the field. Consequently, conclusions could neither be reached regarding the sources of the metals in the environment, nor what plant parts contain the highest amounts.

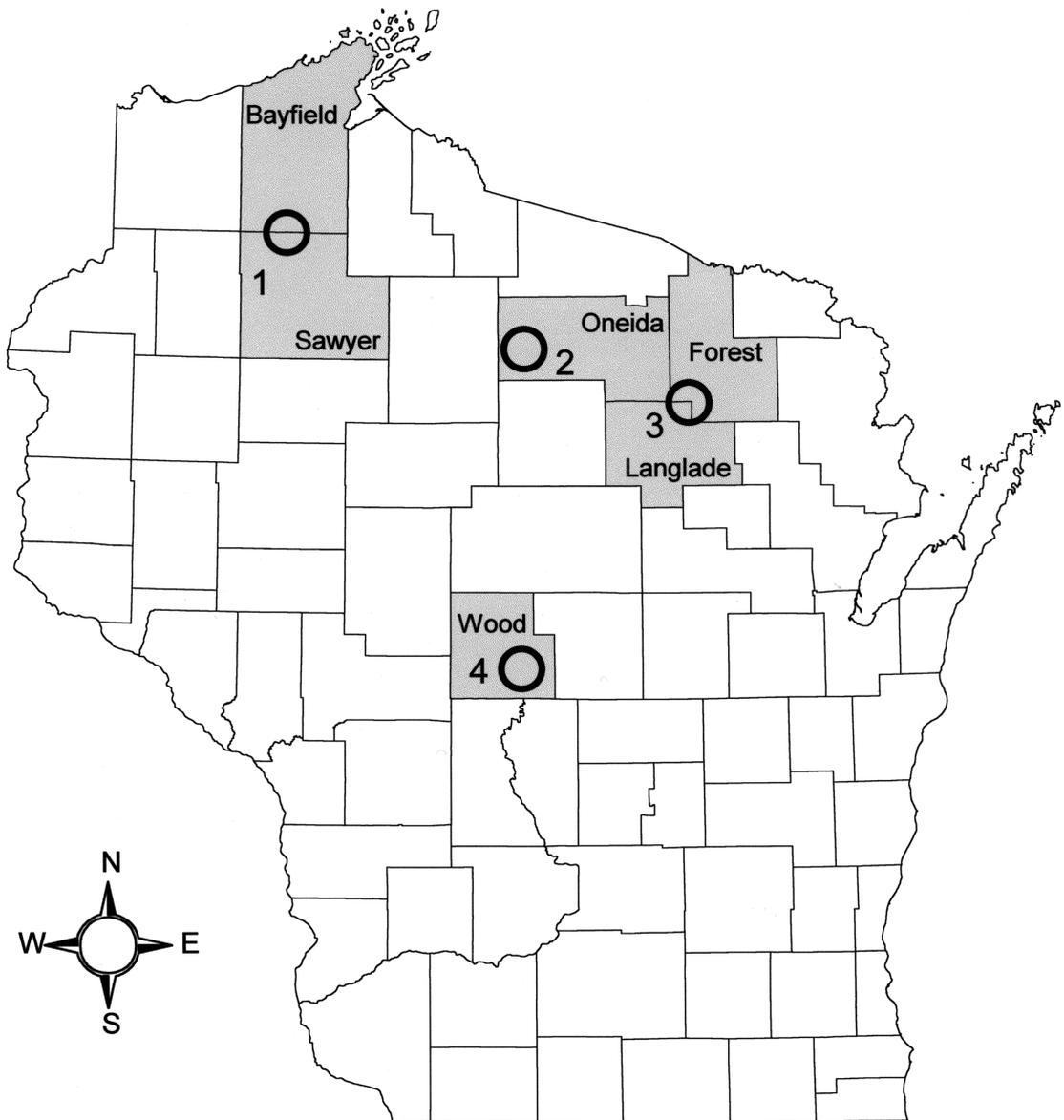
Elements that are considered essential for growth are generally mobile within the plant, while elements considered non-essential and/or toxic are usually confined to roots (Streit and Stumm, 1993), depending on the levels in the plant and the exposure pathway. Plants growing in areas with clean air but showing elevated heavy metals in the roots are probably being exposed in the sediments and soils in which they are growing. It is therefore reasonable to hypothesize that wild rice growing in remote, clean air areas but in possibly polluted waters would exhibit elevated concentrations in their roots and not the grain. We decided to test this hypothesis by sampling wild rice in situ in northern Wisconsin and measuring heavy metals in the roots, stems, leaves, and seeds.

## 2. Materials and methods

Entire wild rice plants were collected at seed set time (September) in 1997 and 1998 from four localities in northern Wisconsin (Fig. 1): Seely (Bayfield and Sawyer Counties), Willow (Oneida County), Crandon (Forest and Langlade Counties), and Port Edwards (Wood County). The first three localities were remote and not close to any point sources, while the last one is 15 km west of a chlor-alkali plant, which is the largest atmospheric emitter of Hg in the state of Wisconsin. Nine plants were collected at Seely, six at Willow, 15 at Port Edwards, and 21 at Crandon, for a total of 51 plants. Plants of a uniform height (1–2 m) were selected and harvested by digging. The roots were washed in place and again back at the laboratory to remove soil.

The plants were separated into their four parts, stored in brown paper bags, and oven dried at 70°C until a constant weight was obtained. All samples were then ground in a stainless steel Wiley mill and nitric acid digested in pyrex tubes at 100–120°C for 3 h. The samples were then analyzed by inductively-coupled plasma emission spectrophotometry at the University of Wisconsin Soil and Plant Analysis Laboratory for 10 elements: Ag, As, Cd, Cr, Cu, Hg, Mg, Pb, Se and Zn. Silver, As, Cr, Cu and Se were not measured in the plants from Port Edwards. All data are expressed on a dry weight basis.

The total potential number of data points was 4 plant parts  $\times$  4 localities  $\times$  12.2 (average) plants locality  $\times$  10 elements = 1950. However, because of missing plant parts (typically insufficient seed for analysis), one outlier value which was omitted, below detection limit values, and part of the design being incomplete, 1315 data points were available for analysis. Values below detection limits varied considerably between elements (Table 1). Copper, Mg and Zn had none, Ag, Pb and Cd ranged from 5 to 14%, As and Cr averaged 27%, and Hg and Se were both over 50%. A decision had to be made on how to handle the below detection limit (BDL) values for statistical analyses. Miesch (1976) recommends



- 1 - Seely Area
- 2 - Willow Flowage Area
- 3 - Crandon Area
- 4 - Port Edwards Area

Fig. 1. Map showing four wild rice sample sites in northern Wisconsin.

not analyzing variables with BDLs greater than 20%, and replacing BDLs with 0.7 BDL for vari-

ables that have less than 20% BDLs. Gough et al. (1987) dropped variables with more than 33%

BDLs, and used the same 0.7 BDL replacement value for variables with less than 33% BDLs. Sparling and Lowe (1998) used 0.5 BDL for replacement values and a 50% BDL threshold for inclusion. Another study dropped no variables at all no matter how many BDLs, and made the detection limit the replacement value (Mudrey and Bradbury, 1993). Newman's theoretical study of BDLs (Newman et al., 1989) found that at 50% BDLs the mean can be 40% higher than the true mean for normally distributed data, and less for log-normally distributed data. The mean was only 10% off at 25% BDLs. He recommended a maximum likelihood estimator for replacement values, but 0.7 BDL was very close to the mean at low BDLs percentages, which agreed with Miesch (1976). Consequently, for statistical analyses, we did not analyze BDLs for Hg and Se, and substituted 0.7 BDL for BDL values for As and Cr. All means and medians reported in the results are based on censored data for all elements. Means and medians for As and Cr based on uncensored data (with replacement BDLs) were 10% less than the censored means and medians on average.

Data were analyzed by means of a fixed model two-way analysis of variance using plant parts and localities as sources of variation, in order to test for significant differences between parts and localities and their interaction. Confidence intervals

Table 1

Below detection limit (BDL) sample numbers for 10 elements in wild rice from northern Wisconsin<sup>a</sup>

Element	N	BDLs	Total	BDL (%)
Ag	127	7	134	5
As	97	37	134	28
Cd	166	28	194	14
Cr	99	35	134	26
Cu	134	0	134	0
Hg	64	130	194	67
Mg	194	0	194	0
Pb	180	14	194	7
Se	60	74	134	55
Zn	194	0	194	0
Total	1315	325	1640	20

<sup>a</sup>Sample numbers are combinations of four plant parts and four localities.

Table 2

Concentrations (ppm) of 10 elements in four plant parts and their average of wild rice plants from four localities in northern Wisconsin<sup>a</sup>

Element <sup>b</sup>	Root	Stem	Leaf	Seed	Average
<b>Ag</b>	0.026 (36)	0.010 (34)	0.021 (32)	0.008 (25)	0.017 (127)
<b>As<sup>c</sup></b>	12.00 (36)	0.43 (27)	0.81 (30)	0.11 (4)	4.82 (97)
<b>Cd<sup>c</sup></b>	0.154 (51)	0.041 (43)	0.093 (48)	0.021 (24)	0.087 (166)
<b>Cr<sup>c</sup></b>	5.77 (35)	0.54 (22)	1.39 (26)	0.49 (16)	2.61 (99)
<b>Cu</b>	4.82 (36)	1.43 (36)	2.55 (33)	5.27 (29)	3.45 (134)
Hg	0.033 (26)	0.022 (13)	0.023 (18)	0.035 (7)	0.028 (64)
<b>Mg<sup>c</sup></b>	1996 (51)	1193 (51)	2441 (48)	1175 (44)	1708 (194)
<b>Pb<sup>c</sup></b>	6.24 (51)	0.35 (49)	0.94 (48)	0.96 (32)	2.28 (180)
<b>Se</b>	0.80 (36)	0.29 (10)	0.32 (11)	0.21 (3)	0.599 (60)
<b>Zn</b>	28.7 (51)	17.1 (51)	12.9 (48)	43.9 (44)	25.2 (194)

<sup>a</sup>Means are displayed followed by sample sizes in parentheses.

<sup>b</sup>Elements whose parts differed statistically at the 0.05 probability level are shown in bold print.

<sup>c</sup>These elements had statistically significant plant part × locality interactions.

of means and medians were calculated to determine baseline values. The data for all 10 elements in the four plant parts at all localities were merged into a set containing 194 cases and correlated for a factor analysis to determine the relationships among the elements. The factors were extracted by principal components analysis and quartimax rotation. All statistics were calculated using either SYSTAT or MINITAB.

### 3. Results

Nine of the 10 elements were significantly different between roots, stems, leaves and seeds (Table 2). Six elements were highest in roots: Ag, As (Fig. 2), Cd, Cr, Pb and Se. Copper and Zn were both highest in seeds, followed by roots, and then low in leaves and stems. Lead was almost

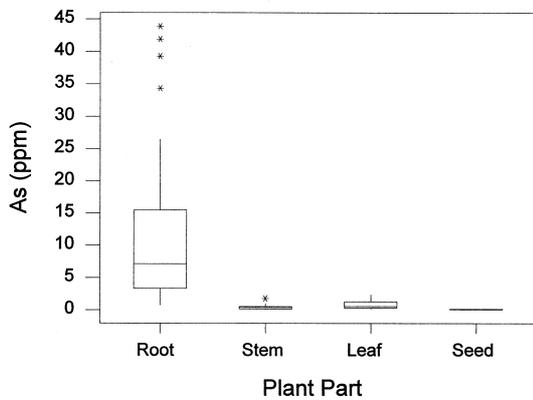


Fig. 2. Boxplots of arsenic concentrations in roots, stems, leaves and seeds of wild rice plants from northern Wisconsin, averaged across four localities.

three times higher in leaves and seeds than in stems, although still very much lower than in roots. Magnesium was highest in leaves, followed by roots. Mercury was highest in roots and seeds

compared to stems and leaves, although this was not significant at the 0.05 probability level.

Six elements were significantly different among the four localities: Ag, As, Cr, Mg, Pb, and Zn (Table 3). Plants at Crandon and Willow were highest for As, Pb and Zn. Chromium and Mg were highest in plants at Crandon, and Ag was highest at Willow. Port Edwards or Seely generally tended to have plants with the lowest concentrations.

Concentrations of As, Cd, Cr, Mg and Pb depended on the interaction between plant part and locality. Cd in roots was highest at all localities except at Seely, where leaves were higher. Cd in seeds and stems did not differ much between localities. Magnesium was highest in leaves at all localities except Crandon, where roots, leaves and stems all had the same concentration. The highest root concentrations of Pb were found at Crandon and Willow, but the concentrations at the other two localities still exceeded the other plant

Table 3  
Average concentrations (ppm) of 10 elements in wild rice plants from four localities in northern Wisconsin<sup>a</sup>

Element <sup>b,d</sup>	Seely	Willow	Crandon	Port Edwards <sup>c</sup>
<b>Ag</b>	0.017 (34)	0.028 (18)	0.015 (75)	
<b>As</b>	2.02 (22)	5.01 (12)	5.77 (63)	
<b>Cd<sup>d</sup></b>	0.145 (29)	0.064 (18)	0.089 (81)	0.054 (38)
<b>Cr</b>	2.28 (23)	1.37 (6)	2.82 (70)	
<b>Cu</b>	3.28 (35)	2.90 (18)	3.64 (81)	
<b>Hg</b>	0.034 (13)	0.005 (1)	0.026 (26)	0.029 (24)
<b>Mg<sup>d</sup></b>	1742 (35)	1256 (18)	2212 (81)	1146 (60)
<b>Pb<sup>d</sup></b>	1.90 (27)	3.42 (16)	3.13 (77)	1.06 (60)
<b>Se</b>	0.617 (14)	0.566 (12)	0.603 (34)	
<b>Zn</b>	21.8 (35)	24.5 (18)	28.0 (81)	23.5 (60)

<sup>a</sup> Means are displayed followed by sample sizes in parentheses.

<sup>b</sup> Elements that differed statistically at the 0.05 probability level are shown in bold print.

<sup>c</sup> Ag, As, Cr, Cu and Se were not measured in plants from Port Edwards.

<sup>d</sup> These elements had statistically significant plant part × locality interactions.

Table 4

Factor loadings of eight elements measured in four plant parts in wild rice plants from northern Wisconsin<sup>a</sup>

Element	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
As	<b>0.907</b>	0.014	0.115	0.051	0.163
Se	<b>0.695</b>	0.102	0.299	0.100	0.462
Cu	0.553	0.013	<b>0.759</b>	0.036	0.177
Mg	0.060	<b>0.939</b>	0.062	0.137	0.292
Zn	0.097	0.061	<b>0.938</b>	0.068	0.124
Cd	0.152	0.147	0.123	<b>0.923</b>	0.296
Pb	0.139	0.169	0.321	0.170	<b>0.822</b>
Cr	0.416	0.163	0.038	0.097	<b>0.821</b>
Percent of total variance explained	23	12	21	12	23

<sup>a</sup>Loadings greater than 0.6 are shown in bold print. Factors are listed in output order following quartimax rotation, and accounted for 91% of the variation in the data.

parts, which hardly varied across localities. The high concentrations in the roots of Ag, As, Cr, Hg and Se were all at Crandon. The highest concentrations of Cu and Zn in seeds were found at Crandon and Port Edwards.

Factor analysis of the element correlation matrix was performed to examine the relationships among the elements. Five factors were extracted which accounted for 90.4% of the variance in the data (Table 4). Communalities (the percent of variance in the data explained by the factors) for eight elements were greater than 80% with this model. Communalities for Ag and Hg were very

low and these elements were therefore, omitted from the analysis. Two factors were loaded with a single element each: one for Mg and one for Cd. The remaining three factors were loaded each with a pair of elements: As and Se, Cu and Zn, and Pb and Cr.

Baseline values for the 10 elements were calculated for seed only (Table 5), because they are the part of the plant that is consumed as food. Baselines are presented as 95% confidence intervals of the medians because they are better measures of central tendencies than means for data that are not normally distributed. The interval for Hg is

Table 5

Baselines (ppm) for 10 elements in wild rice seed from northern Wisconsin<sup>a</sup>

Element	Lower	Median	Upper	Interval percent of the median <sup>b</sup>
Ag	0.003	0.006	0.010	58
As	0.018	0.136	0.161	53
Cd	0.012	0.016	0.020	25
Cr	0.138	0.285	0.590	79
Cu	3.18	4.15	5.80	32
Hg	0.010	0.022	0.082	164
Mg	1012	1152	1255	11
Pb	0.151	0.250	0.371	44
Se	0.125	0.146	0.364	82
Zn	36.8	43.4	47.0	12

<sup>a</sup>Baseline is the 95% confidence interval of the median.

<sup>b</sup>The interval as a percent of the median is given in column 5.

greater than twice the median, and almost that for Cr and Se. The other intervals are much less, with Mg and Zn a little over 10%.

#### 4. Discussion

It is not surprising that Ag, As, Cd, Cr, Pb and Se were highest in the roots. None of these elements are considered essential for plant growth, and Cr and Pb are not mobile within plants (Streit and Stumm, 1993; [Nriagu and Lin, 1995](#); Pais and Jones, 1997). The mobility of Ag is not known, and As and Se are mobile at low concentrations in general. At high concentrations however, As is known to accumulate in the roots of white rice ([Xie and Huang, 1998](#)). Mercury is also known to accumulate in grass roots (Ellis and Eslick, 1997; [Leonard et al., 1998](#)). The additional high concentrations in the wild rice seed may indicate an additional path for Hg in these localities, possibly atmospheric, because most plants absorb elemental gaseous Hg readily (Streit and Stumm, 1993).

Copper and Zn are both essential elements for plant growth, and are mobile within the plant, which probably explains the highest concentrations in wild rice seeds (Streit and Stumm, 1993; [Welch, 1995](#)). Magnesium is not only essential, but is a component of chlorophyll, which is located in leaves, which explains the highest concentrations in the wild rice leaves.

The factor analysis helps explain the patterns among the elements. Copper and Zn were together on one factor because they are the only two elements that were highest in concentration in the seeds (Fig. 3). This pairing may occur because the Crandon and Willow Flowage sample areas are located in close proximity to the Crandon and Lynne potential mine sites. These massive sulfide deposits contain ore grade zinc and copper deposits which may contribute to the high concentrations of these elements in the wild rice samples at these locations. Correlations among geologic characteristics and the elements in the plant suggest that wild rice may be a useful species in environmental monitoring efforts.

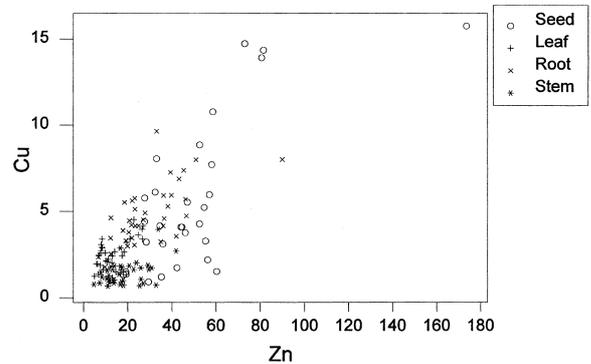


Fig. 3. Scatterplot of copper and zinc concentrations in roots, stems, leaves and seeds of wild rice plants from northern Wisconsin, averaged across four localities. The correlation coefficient is 0.76 ( $P > 0.000$ ).

Magnesium was on one factor because it was the only element highest in leaves. Arsenic and Se were highest in roots and are both fairly mobile in plants, indicating they share some biochemical affinities, which is plausible given they are adjacent on the periodic table. Lead and Cr were on one factor probably because they were highest in roots and are not mobile in the plant. Cadmium, a toxic transition metal, was alone on a factor probably because of its unique interaction with locality. Mercury and Ag were not analyzed in the factor analysis because no factors could explain their patterns, probably due to missing data and/or no treatment effects.

The overall health of these wild rice plants can be evaluated by comparing the element contents in the seeds with what is known in the literature. In addition, such a comparison helps evaluate the effects of consumption on human health because the seeds are the part that is consumed. The mean value of 5.27 ppm for Cu is virtually identical with 5.24 ppm for wild rice given by the US Department of Agriculture (Drake et al., 1989) and is lower than the 9.00 ppm for wild rice bought in stores by Nriagu and Lin (1995). Pip (1993) in Canada only reported a range for Cu of 1.6–14.4 ppm.

The mean for Mg in seed was 1175 ppm, which compares favorably with 1770 ppm (Drake et al., 1989) and the range of 800–1610 ppm reported by

Anderson (1976). The average for Zn of 43.9 ppm is almost twice as high as Nriagu and Lin's value of 23.0 ppm, but is less than the US Department of Agriculture's value of 59.6 ppm (Drake et al., 1989) and Anderson's value of 65.0 ppm (Anderson, 1976).

The mean of 0.021 ppm for Cd is less than half of 0.053 ppm for wild rice bought in stores (Nriagu and Lin, 1995) and much less than Pip's (Pip, 1993) maximum of 6.2 ppm for Canada. The mean for As, however, is almost double that of Nriagu and Lin's value of 0.066 ppm for store-bought wild rice (Nriagu and Lin, 1995). Similarly, Pb is more than double their value of 0.042 ppm, but less than Pip's maximum of 6.7 ppm (Pip, 1993). No values could be found for Ag, Cr, Hg, or Se in wild rice in the literature, but the values for the seeds in this study are lower than general values for food plants (Kabata-Pendias and Pendias, 1984).

The high concentrations of As in roots is interesting. Arsenic contamination of sandstone aquifer water in eastern Wisconsin is common in the counties to the east of these study areas (Burkel, 1993; Pelczar, 1996; Burkel and Stoll, 1999). This is due to naturally occurring arsenic in the St. Peter Sandstone underlying the glacial deposits. Elevated arsenic in groundwater in other northern counties of Wisconsin has been reported by Mudrey and Bradbury (1993). It appears that there is some probability that the elevated arsenic in the wild rice may be due to this natural phenomenon.

Conversely, the pattern of high concentrations of As, Pb and Hg in roots and seeds, and above normal levels of As and Pb in seeds suggests that some of these elements are in sediments, but that some may also be from the atmosphere. This is plausible given that all three elements are known atmospheric pollutants, which are released to the atmosphere by agricultural practices and or emitted by fossil fuel combustion.

In conclusion, it appears that the wild rice plants from northern Wisconsin had normal levels of the nutritional elements Cu, Mg and Zn in the seeds and these elements were distributed within the plants as expected. Silver, Cd, Hg, Cr, and Se were very low in concentration or within

normal limits for food plants. Arsenic and Pb, however, were elevated and could pose a problem for human health, and should be studied more.

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## FOND DU LAC RESERVATION

### Wild Rice Ecosystems Management

Information pertinent to the management of a self-sustaining wild rice bed includes water quality, morphometric, and hydrologic data. A recent history of the ecosystem is also valuable, particularly when rice production problems require diagnosis. Such historical data is usually land use related and may include point or non-point pollution sources, as well as ditching or man-made water retention structures.

The annual aquatic grass wild rice is found in a marsh flowage ecosystem where it competes with various other aquatic annual and perennial plants for space. These plants include:

Wild Celery	Three-way Sedge
Yellow Water Lily	Pondweeds (several)
White Water Lily	Water Milfoil
Arrowhead	Water Marigold
Pickeralweed	Bladderwort
Sweet Flag	Coontail

Tribal research of wild rice ecosystems has produced the following management information.

1. Natural wild rice requires good water quality. Excessive dissolved nutrients cause attached algae to overproduce on the growing rice stalks, weighting the stalks down and potentially drowning them. Also, the growth mechanisms of perennials give them a long-term advantage under increased nutrient conditions.
2. Water levels need to be managed for the optimization of rice production. Generally, the water level required for a given rice lake may be managed using a staff gauge to monitor the lake water level. Generally, the lake's water drainage system is opened in early spring to permit the lake to flush with the spring melt. This aeration of the oxygen depleted lake bottom enhances the conditions for wild rice germination.