



LWCF Proposal Description and Environmental Screening Form

The purpose of this Proposal Description and Environmental Screening Form (PD/ESF) is to provide descriptive and environmental information about a variety of Land and Water Conservation Fund (LWCF) state assistance proposals submitted for National Park Service (NPS) review and decision. The completed PD/ESF becomes part of the “federal administrative record” in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations. The PD portion of the form captures administrative and descriptive details enabling the NPS to understand the proposal. The ESF portion is designed for States and/or project sponsors to use while the LWCF proposal is under development. Upon completion, the ESF will indicate the resources that could be impacted by the proposal enabling States and/or project sponsors to more accurately follow an appropriate pathway for NEPA analysis: 1) a recommendation for a Categorical Exclusion (CE), 2) production of an Environmental Assessment (EA), or 3) production of an Environmental Impact Statement (EIS). The ESF should also be used to document any previously conducted yet still viable environmental analysis if used for this federal proposal. The completed PD/ESF must be submitted as part of the State’s LWCF proposal to NPS.

Except for the proposals listed below, the PD/ESF **must** be completed, including the appropriate NEPA document, signed by the State, and submitted with each new federal application for LWCF assistance and amendments for: scope changes that alter or add facilities and/or acres; conversions; public facility exceptions; sheltering outdoor facilities; and changing the original intended use of an area from that which was approved in an earlier LWCF agreement. Consult the LWCF Program Manual (www.nps.gov/lwcf) for detailed guidance for your type of proposal and on how to comply with NEPA.

For the following types of proposals only this Cover Page is required because these types of proposals are administrative in nature and are categorically excluded from further NEPA environmental analysis. NPS will complete the NEPA CE Form. Simply check the applicable box below, and complete and submit only this **Cover Page** to NPS along with the other items required for your type of proposal as instructed in the LWCF Program Manual.

- SCORP planning proposal
- Time extension with no change in project scope or with a reduction in project scope
- To delete work **and** no other work is added back into the project scope
- To change project cost with no change in project scope or with a reduction in project scope
- To make an administrative change that does not change project scope



Name of LWCF Proposal: Waterloo Recreation Area Conversion **Date Submitted to NPS:**

Prior LWCF Project Number(s) *List all prior LWCF project numbers and all park names associated with assisted site(s):*

26-00080, 26-00095, 26-00184, 26-00253, 26-00194, 26-00410, 26-00468, 26-00554, 26-00578, 26-00726, 26-00919, 26-01037, 26-01569 (See Map B)

Local or State Project Sponsoring Agency (*recipient or sub-recipient in case of pass-through grants*):

Michigan Department of Natural Resources and Environment

Local or State Sponsor Contact: Name/Title: Paul Yauk

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Stevens T. Mason Building
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Lansing, MI 48909-7757

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517-373-4624 fax

Using a separate sheet for narrative descriptions and explanations, address each item and question in the order it is presented, and identify each response with its item number such as Step 1-A1, A2; Step 3-B1; Step 6-A1, A29; etc.

Step 1. Type of LWCF Proposal

New Project Application

- Acquisition** *Go to Step 2A* **Development** *Go to Step 2B* **Combination (Acquisition & Development)** *Go to Step 2C*

X Project Amendment

- Increase in scope or change in scope from original agreement.** *Complete Steps 3A, and 5 through 7.*

X **6(f) conversion proposal.** *Complete Steps 3B, and 5 through 7.*

- Request for public facility in a Section 6(f) area.** *Complete Steps 3C, and 5 through 7.*

Request for temporary non-conforming use in a Section 6(f) area.

Complete Steps 4A, and 5 through 7.

Request for significant change in use/intent of original LWCF application.

Complete Steps 4B, and 5 through 7.

Request to shelter existing/new facility within a Section 6(f) area regardless of funding source. *Complete Steps 4C, and 5 through 7.*

Step 2. New Project Application (See LWCF Manual for guidance.)

A. For an Acquisition Project

1. Provide a brief narrative about the proposal that provides the reasons for the acquisition, the number of acres to be acquired with LWCF assistance, and a description of the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.).
2. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?
3. Describe development plans for the proposal for the site(s) for public outdoor recreation use within the next three (3) years.
4. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.
5. Address each item in "D" below.

B. For a Development Project

1. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.
2. When will the project be completed and open for public outdoor recreation use?
3. Address each item in "D" below.

C. For a Combination Project

1. For the acquisition part of the proposal:
 - a. Provide a brief narrative about the proposal that provides the reasons for the acquisition, number of acres to be acquired with LWCF assistance, and describes the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.)
 - b. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?
 - c. Describe development plans for the proposed for the site(s) for public outdoor recreation use within the next three (3) years.
 - d. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.
2. For the development part of the proposal:
 - a. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.
 - b. When will the project be completed and open for public outdoor recreation use?
3. Address each item in "D" below.

D. Additional items to address for a new application and amendments

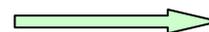
1. Will this proposal create a **new** public park/recreation area **where none previously existed** and is not an addition to an existing public park/recreation area? Yes ___ (go to #3) No ___ (go to #2)
2. a. What is the name of the pre-existing public area that this new site will be added to? **Hollister Park**
b. Is the pre-existing public park/recreation area already protected under Section 6(f)? Yes ___ No ___
If no, will it now be included in the 6(f) boundary? Yes ___ No ___
3. What will be the name of this **new** public park/recreation area?
4. a. Who will hold title to the property assisted by LWCF? Who will manage and operate the site(s)?
b. What is the sponsor's type of ownership and control of the property?
___ Fee simple ownership
___ Less than fee simple. Explain:
___ Lease. Describe lease terms including renewable clauses, # of years remaining on lease, etc.
Who will lease area? Submit copy of lease with this PD/ESF. (See LWCF Manual for **program restrictions** for leases and further guidance.)
5. Describe the nature of any rights-of-way, easements, reversionary interests, etc. to the Section 6(f) park area? Indicate the location on 6(f) map. Do parties understand that a Section 6(f) conversion may occur if private or non-recreation activities occur on any pre-existing right-of-way, easement, leased area?
6. Are overhead utility lines present, and if so, explain how they will be treated per LWCF Manual.
7. As a result of this project, describe **new** types of outdoor recreation opportunities and capacities, and short and long term public benefits.

8. Explain any existing non-recreation and non-public uses that will continue on the site(s) and/or proposed for the future within the 6(f) boundary.
9. Describe the planning process that led to the development of this proposal. Your narrative should address:
 - a. How was the interested and affected public notified and provided opportunity to be involved in planning for and developing your LWCF proposal? Who was involved and how were they able to review the **completed** proposal, including any state, local, federal agency professionals, subject matter experts, members of the public and Indian Tribes. Describe any public meetings held and/or formal public comment periods, including dates and length of time provided for the public to participate in the planning process and/or to provide comments on the completed proposal.
 - b. What information was made available to the public for review and comment? Did the sponsor provide written responses addressing the comments? If so, include responses with this PD/ESF submission.
10. How does this proposal implement statewide outdoor recreation goals as presented in the Statewide Comprehensive Outdoor Recreation Plan (SCORP) (include references), and explain why this proposal was selected using the State's Open Project Selection Process (OPSP).
11. List all source(s) and amounts of financial match to the LWCF federal share of the project. The value of the match can consist of cash, donation, and in-kind contributions. The federal LWCF share and financial matches must result in a viable outdoor recreation area and not rely on other funding not mentioned here. Other federal resources may be used as a match if specifically authorized by law.

Source	Type of Match	Value
		\$
		\$
		\$

12. Is this LWCF project scope part of a larger effort not reflected on the SF-424 (*Application for Federal Assistance*) and grant agreement? If so, briefly describe the larger effort, funding amount(s) and source(s). This will capture information about partnerships and how LWCF plays a role in leveraging funding for projects beyond the scope of this federal grant.
13. List all required federal, state, and local permits/approvals needed for the proposal and explain their purpose and status.

Proceed to Steps 5 through 7



Step 3. Project Amendment (See LWCF Manual for guidance.)

A. Increase/Change in Project Scope

1. **For Acquisition Projects:** To acquire additional property that was not described in the original project proposal and NEPA documentation, follow Step 2A-Acquisition Project and 2D.
2. **For Development Projects:** To change the project scope for a development project that alters work from the original project scope by adding elements or enlarging facilities, follow Step 2B-Development Project and 2D.
3. **For Combination Projects:** Follow Step 2C as appropriate.

B. Section 6(f)(3) Conversion Proposal

Prior to developing your Section 6(f)(3) conversion proposal, you must consult the LWCF Manual and 36 CFR 59.3 for complete guidance on conversions. Local sponsors must consult early with the State LWCF manager when a conversion is under consideration or has been discovered. States must consult with their NPS-LWCF manager as early as possible in the conversion process for guidance and to sort out and discuss details of the conversion proposal to avoid mid-course corrections and unnecessary delays. **A critical first step is for the State and NPS to agree on the size of the Section 6(f) park land impacted by any non-recreation, non-public use.**

especially prior to any appraisal activity. Any previous LWCF project agreements and actions must be identified and understood to determine the actual Section 6(f) boundary.

The Section 6(f)(3) conversion proposal including the required NEPA environmental review documents (CE recommendation or an EA document) must focus on the loss of public outdoor recreation park land and recreational usefulness, and its replacement per 36 CFR 59, and **not** the activities precipitating the conversion or benefits thereof, such as the impacts of constructing a new school to relieve overcrowding or constructing a hotel/restaurant facility to stimulate the local economy. Rather, the environmental review must 1) focus on “resource impacts” as indicated on the ESF (Step 6), including the loss of public park land and recreation opportunities (ESF A-15), and 2) the impacts of creating new replacement park land and replacement recreation opportunities. A separate ESF must be generated for the converted park area and each replacement site. Section 6(f)(3) conversions always have more than minor impacts to outdoor recreation (ESF A-15) as a result of loss of parkland requiring an EA, except for “small” conversions as defined in the LWCF Manual Chapter 8.

For NPS review and decision, the following elements are required to be included in the State’s completed conversion proposal to be submitted to NPS:

1. A letter of transmittal from the SLO recommending the proposal. [\(See Attached\)](#)
2. A detailed explanation of the sponsor’s need to convert the Section 6(f) parkland including all efforts to consider other practical alternatives to this conversion, how they were evaluated, and the reasons they were not pursued. [\(See Environmental Assessment, Chapter 1 \(need\) and Chapter 2 \(Alternatives Considered\)\)](#)
3. An explanation of how the conversion is in accord with the State Comprehensive Outdoor Recreation Plan (SCORP).

[The proposed conversion is consistent with the goals of the Michigan 2006- 2011 State Comprehensive Outdoor Recreation Plan \(SCORP\). In particular the Mitigation parcel and the eventual restoration of both the Mitigation and Conversion parcels satisfy the SCORP goal of resource conservation by securing significant inholdings and restoring and enhancing the natural resource quality of a significant outdoor recreation venue.](#)

4. Completed “State Appraisal/Waiver Valuation Review form in Step 7 for each of the converted and replacement parcels certifying that the appraisals meet the “Uniform Appraisal Standards for Federal Land Acquisitions.” States must retain copies of the appraisals/waiver valuations and make them available for review upon request. [\(See Attached\)](#)
5. For the park land proposed for conversion, a detailed description including the following:
 - a. Specific geographic location on a map, 9-digit zip code, and name of park or recreation area proposed for conversion. [\(See Attached\)](#)
 - b. Description of the area proposed for the conversion including the acreage to be converted and any acreage remaining. For determining the size of the conversion, consider not only the physical footprint of the activity precipitating the conversion, but how the precipitating activity will impact the entire 6(f) park area. In many cases the size of the converted area is larger than the physical footprint. Include a description of the recreation resources, facilities, and recreation opportunities that will be impacted, displaced or lost by the proposed conversion. For proposals to partially convert a Section 6(f) park area, the remaining 6(f) park land must remain recreationally viable and not be impacted by the activities that are precipitating the conversion. If it is anticipated that the precipitating activities impact the remaining Section 6(f) area, the proposed area for the conversion should be expanded to encompass all impacted park land. [\(See Attached\)](#)
 - c. Description of the community and population served by the park, including users of the park and uses. [\(See Attached\)](#)
 - d. For partial conversions, a revised 6(f) map clearly indicating both the portion that is being converted and the portion remaining intact under Section 6(f). [\(See Attached\)](#)
6. For each proposed replacement site:
 - a. Specific geographic location on a map, 9-digit zip code, and geographical relationship of converted and replacement sites. If site will be added to an existing public park/outdoor recreation area, indicate on map. [\(See Attached\)](#)

- b. Description of the site's physical characteristics and resource attributes with number and types of resources and features on the site, for example, 15 acres wetland, 2,000 feet beachfront, 50 acres forest, scenic views, 75 acres riparian, vacant lot, special habitat, any unique or special features, structures, recreation amenities, historic/cultural resources, hazardous materials/contamination history, restrictions, institutional controls, easements, rights-of-way, overhead/underground utilities including overhead wires, towers, etc. (See Attached)
 - c. Identification of the owner of the replacement site and its recent history of use/function up to the present. (See Attached)
 - d. Detailed explanation of how the proposed replacement site is of reasonably equivalent usefulness and location as the property being converted, including a description of the recreation needs that will be met by the new replacement parks, populations to be served, and new outdoor recreation resources, facilities, and opportunities to be provided. (See Attached)
 - e. Identification of owner and manager of the new replacement park? (See Attached)
 - f. Name of the new replacement park. If the replacement park is added to an existing public park area, will the existing area be included within the 6(f) boundary? What is the name of the existing public park area? (See Attached)
 - g. Timeframe for completing the new outdoor recreation area(s) to replace the recreation opportunity lost per the terms of conversion approval and the date replacement park(s) will be open to the public. (See Attached)
 - h. New Section 6(f) map for the new replacement park. (See Attached)
7. NEPA environmental review, including NHPA Section 106 review, for both the converted and replacement sites in the same document to analyze how the converted park land and recreational usefulness will be replaced. Except for "small" conversions (see LWCF Manual Chapter 8), conversions usually require an EA. (See Attached)

Proceed to Steps 5 through 7

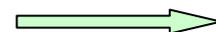


C. Proposal for a Public Facility in a Section 6(f) Area

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. In summary, NPS must review and decide on requests to construct a public indoor and/or non-recreation facility within a Section 6(f) area. In certain cases NPS may approve the construction of public facilities within a Section 6(f) area where it can be shown that there will be a net gain in **outdoor recreation** benefits and enhancements for the entire park. In most cases, development of a non-recreation public facility within a Section 6(f) area constitutes a conversion. For NPS review, the State/sponsor must submit a proposal to NPS under a letter of transmittal from the SLO that:

- 1. Describes the purpose and all proposed uses of the public facility such as types of programming, recreation activities, and special events including intended users of the new facility and any agency, organization, or other party to occupy the facility. Describe the interior and exterior of the facility, such as office space, meeting rooms, food/beverage area, residential/lodging area, classrooms, gyms, etc. Explain how the facility will be compatible with the outdoor recreation area. Explain how the facility and associated uses will significantly support and enhance existing and planned outdoor recreation resources and uses of the site, and how outdoor recreation use will remain the primary function of the site. (The public's outdoor recreation use must continue to be greater than that expected for any indoor use, unless the site is a single facility, such as a swimming pool, which virtually occupies the entire site.)
- 2. Indicates the exact location of the proposed public facility and associated activities on the site's Section 6(f) map. Explain the design and location alternatives considered for the public facility and why they were not pursued.
- 3. Explains who will own and/or operate and maintain the facility? Attach any 3rd party leases and operation and management agreements. When will the facility be open to the public? Will the facility ever be used for private functions and closed to the public? Explain any user or other fees that will be instituted, including the fee structure.
- 4. Includes required documents as a result of a completed NEPA process (Steps 5 – 7).

Proceed to Steps 5 through 7



Step 4. Proposals for Temporary Non-Conforming Use, Significant Change in Use, and Sheltering Facilities (See LWCF Manual for guidance.)

A. Proposal for Temporary Non-Conforming Use

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decided on requests for temporary uses that do not meet the requirements of allowable activities within a Section 6(f) area. A temporary non-conforming use is limited to a period of six months (180 days) or less. Continued use beyond six-months will not be considered temporary, and may result in a Section 6(f)(3) conversion of use requiring the replacement of converted parkland. For NPS review, describe the temporary non-conforming use (activities other than public outdoor recreation) in detail including the following information:

1. A letter of transmittal from the SLO recommending the proposal.
2. Describe in detail the proposed temporary non-conforming use and all associated activities, why it is needed, and alternative locations that were considered and why they were not pursued.
3. Explain length of time needed for the temporary non-conforming use and why.
4. Describe the size of the Section 6(f) area affected by the temporary non-conforming use activities and expected impacts to public outdoor recreation areas, facilities and opportunities. Explain efforts to keep the size of the area impacted to a minimum. Indicate the location of the non-conforming use on the site's 6(f) map.
5. Describe any anticipated temporary/permanent impacts to the Section 6(f) area and how the sponsor will mitigate them during and after the non-conforming use ceases.
6. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7



B. Proposal for Significant Change in Use

Prior to developing the proposal, you must consult the LWCF Manual for complete guidance. NPS approval must be obtained prior to any change from one eligible use to another when the proposed use would significantly contravene the original plans or intent for the area outlined in the original LWCF application for federal assistance. Consult with NPS for early determination on the need for a formal review. NPS approval is only required for proposals that will **significantly** change the use of a LWCF-assisted site (e.g., from passive to active recreation). The proposal must include and address the following items:

1. A letter of transmittal from the SLO recommending the proposal.
2. Description of the proposed changes and how they significantly contravene the original plans or intent of LWCF agreements.
3. Explanation of the need for change in use and how the change is consistent with local plans and the SCORP.
4. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7



C. Proposal for Sheltering Facilities

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decide on all proposals to shelter an existing outdoor recreation facility or construct a new sheltered recreation facility within a Section 6(f) area regardless of funding source. The proposal must demonstrate that there is an increased benefit to public recreation opportunity. Describe the sheltering proposal in detail, including the following:

1. A letter of transmittal from the SLO recommending the proposal.
2. Describe the proposed sheltered facility, how it would operate, how the sheltered facility will include recreation uses that could typically occur outdoors, and how the primary purpose of the sheltered facility is recreation.

3. Explain how the sheltered facility would not substantially diminish the outdoor recreation values of the site including how the sheltered facility will be compatible and significantly supportive of the outdoor recreation resources present and/or planned.
4. Explain how the sheltered facility will benefit the total park's outdoor recreation use.
5. Describe efforts provided to the public to review the proposal to shelter the facility and has local support.
6. Document that the sheltered facility will be under the control and tenure of the public agency which sponsors and administers the original park area.
7. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7



Step 5. Summary of Previous Environmental Review (including E.O. 12372 - Intergovernmental Review)

To avoid duplication of effort and unnecessary delays, describe any prior environmental review undertaken at any time and still viable for this proposal or related efforts that could be useful for understanding potential environmental impacts. Consider previous local, state, federal (e.g. HUD, EPA, USFWS, FHWA, DOT) and any other environmental reviews. At a minimum, address the following:

1. Date of environmental review(s), purpose for the environmental review(s) and for whom they were conducted.
2. Description of the proposed action and alternatives.
3. Who was involved in identifying resource impact issues and developing the proposal including the interested and affected public, government agencies, and Indian tribes.
4. Environmental resources analyzed and determination of impacts for proposed actions and alternatives.
5. Any mitigation measures to be part of the proposed action.
6. Intergovernmental Review Process (Executive Order 12372): Does the State have an Intergovernmental Review Process? Yes _____ No _____. If yes, has the LWCF Program been selected for review under the State Intergovernmental Review Process? Yes _____ No _____. If yes, was this proposal reviewed by the appropriate State, metropolitan, regional and local agencies, and if so, attach any information and comments received about this proposal. If proposal was not reviewed, explain why not.
7. Public comment periods (how long, when in the process, who was invited to comment) and agency response.
8. Any formal decision and supporting reasons regarding degree of potential impacts to the human environment.
9. Was this proposed LWCF federal action and/or any other federal actions analyzed/reviewed in any of the previous environmental reviews? If so, what was analyzed and what impacts were identified? Provide specific environmental review document references.

Use resource impact information generated during previous environmental reviews described above and from recently conducted site inspections to complete the Environmental Screening Form (ESF) portion of this PD/ESF under Step 6. Your ESF responses should indicate your proposal's potential for impacting each resource as determined in the previous environmental review(s), and include a reference to where the analysis can be found in an earlier environmental review document. If the previous environmental review documents contain proposed actions to mitigate impacts, briefly summarize the mitigation for each resource as appropriate. The appropriate references for previous environmental review document(s) must be documented on the ESF, and the actual document(s) along with this PD/ESF must be included in the submission for NPS review.

Proceed to Steps 6 through 7



Step 6. Environmental Screening Form (ESF)

This portion of the PD/ESF is a working tool used to identify the level of environmental documentation which must accompany the proposal submission to the NPS. By completing the ESF, the project sponsor is providing support for its recommendation in Step 7 that the proposal either:

1. meets criteria to be categorically excluded (CE) from further NEPA review and no additional environmental documentation is necessary; or
2. requires further analysis through an environmental assessment (EA) or an environmental impact statement (EIS).

An ESF alone does not constitute adequate environmental documentation unless a CE is recommended. If an EA is required, the EA process and resulting documents must be included in the proposal submission to the NPS. If an EIS may be required, the State must request NPS guidance on how to proceed.

The scope of the required environmental analysis will vary according to the type of LWCF proposal. For example, the scope for a new LWCF project will differ from the scope for a conversion. Consult the LWCF Manual for guidance on defining the scope or extent of environmental analysis needed for your LWCF proposal. As early as possible in your planning process, consider how your proposal/project may have direct, indirect and cumulative impacts on the human environment for your type of LWCF action so planners have an opportunity to design alternatives to lessen impacts on resources, if appropriate. When used as a planning tool in this way, the ESF responses may change as the proposal is revised until it is ready for submission for federal review. Initiating or completing environmental analysis after a decision has been made is contrary to both the spirit and letter of the law of the NEPA.

The ESF should be completed with input from resource experts and in consultation with relevant local, state, tribal and federal governments, as applicable. The interested and affected public should be notified of the proposal and be invited to participate in scoping out the proposal (see LWCF Manual Chapter 4). At a minimum, a site inspection of the affected area must be conducted by individuals who are familiar with the type of affected resources, possess the ability to identify potential resource impacts, and to know when to seek additional data when needed.

At the time of proposal submission to NPS for federal review, the completed ESF must justify the NEPA pathway that was followed: CE recommendation, production of an EA, or production of an EIS. The resource topics and issues identified on the ESF for this proposal must be presented and analyzed in an attached EA/EIS. Consult the LWCF Manual for further guidance on LWCF and NEPA.

The ESF contains two parts that must be completed:

Part A. Environmental Resources

Part B. Mandatory Criteria

Part A: For each environmental resource topic, choose an impact estimate level (none, negligible, minor, exceeds minor) that describes the degree of potential negative impact for each listed resource that may occur directly, indirectly and cumulatively as a result of federal approval of your proposal. For each impacted resource provide a brief explanation of how the resource might be affected, how the impact level was determined, and why the chosen impact level is appropriate. If an environmental review has already been conducted on your proposal and is still viable, include the citation including any planned mitigation for each applicable resource, and choose an impact level as mitigated. If the resource does not apply to your proposal, mark NA in the first column. Add any relevant resources (see A.24 on the ESF) if not included in the list.

Use a separate sheet to briefly clarify how each resource could be adversely impacted; any direct, indirect, and cumulative impacts that may occur; and any additional data that still needs to be determined. Also explain any planned mitigation already addressed in previous environmental reviews. ([See Attached](#))

Part B: This is a list of mandatory impact criteria that preclude the use of categorical exclusions. If you answer "yes" or "maybe" for any of the mandatory criteria, you must develop an EA or EIS regardless of your answers in Part A. Explain all "yes" and "maybe" answers on a separate sheet. ([See Attached EA](#))

For conversions, complete one ESF for each of the converted and replacement sites.

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	Not Applicable- Resource does not exist	No/Negligible Impacts- Exists but no or negligible impacts	Minor Impacts	Impacts Exceed Minor EA/EIS required	More Data Needed to Determine Degree of Impact EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.				X	
2. Air quality		X			
3. Sound (noise impacts)			X		
4. Water quality/quantity		X			
5. Stream flow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands		X			
8. Land use/ownership patterns; property values; community livability			X		
9. Circulation, transportation			X		
10. Plant/animal/fish species of special concern and habitat; state/federal listed or proposed for listing	X				
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.	X				
12. Unique or important wildlife/ wildlife habitat	X				
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)	X				
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. <i>Most conversions exceed minor impacts. See Step 3.B</i>		X			
16. Accessibility for populations with disabilities	X				
17. Overall aesthetics, special characteristics/features				X	
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.		X			
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure		X			
20. Minority and low-income populations		X			
21. Energy resources (geothermal, fossil fuels, etc.)		X			
22. Other agency or tribal land use plans or policies	X				
23. Land/structures with history of contamination/hazardous materials even if remediated	X				
24. Other important environmental resources to address.	X				

B. MANDATORY CRITERIA If your LWCF proposal is approved, would it...	Yes	No	To be determined
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O. 11988); and other ecologically significant or critical areas.		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?			X
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office. (Attach SHPO/THPO Comments)		X	
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	

Environmental Reviewers

The following individual(s) provided input in the completion of the environmental screening form. List all reviewers including name, title, agency, field of expertise. Keep all environmental review records and data on this proposal in state compliance file for any future program review and/or audit. The ESF may be completed as part of a LWCF pre-award site inspection if conducted in time to contribute to the environmental review process for the proposal.

- Ray Fahlsing**
Stewardship Unit Manager
DNRE – Recreation Division
forestry, wildlife biology, ecological restoration
- Glenn Palmgren**
Ecologist
DNRE– Recreation Division
forest ecology, ecological restoration, ornithology
- Thomas Hoane**
Geologist, DNRE
Forest Management Division, Mineral and Land Management
geology

The following individuals conducted a site inspection to verify field conditions.
List name of inspector(s), title, agency, and date(s) of inspection.

1. Ray Fahlsing, Manger Stewardship Unit, Michigan Department of Natural Resources and Environment, 1/17/2006, 9/9/2008, 3/19/2010, 3/20/2010, 5/7/2010, 6/25/2010
2. Glenn Palmgren, Ecologist, Michigan DNRE, 7/28/2005, 6/25/2010, 11/5/2010
3. John Halsey, State Archaeologist, Michigan State Housing Development Authority, 9/17/2010

State may require signature of _____
LWCF sub-recipient applicant here: _____ Date _____

Step 7. Recommended NEPA Pathway and State Appraisal/Waiver Valuation

First, consult the attached list of "Categorical Exclusions (CEs) for Which a Record is Needed." If you find your action in the CE list **and** you have determined in Step 6A that impacts will be minor or less for each applicable environmental resource on the ESF **and** you answered "no" to all of the "Mandatory Criteria" questions in Step 6B, the proposal qualifies for a CE. Complete the following "State LWCF Environmental Recommendations" box indicating the CE recommendation.

If you find your action in the CE list **and** you have determined in Step 6A that impacts will be greater than minor or that more data is needed for any of the resources **and** you answered "no" to all of the "Mandatory Criteria" questions, your environmental review team may choose to do additional analysis to determine the context, duration, and intensity of the impacts of your project or may wish to revise the proposal to minimize impacts to meet the CE criteria. If impacts remain at the greater than minor level, the State/sponsor must prepare an EA for the proposal. Complete the following "State Environmental Recommendations" box indicating the need for an EA.

If you do not find your action in the CE list, regardless of your answers in Step 6, you must prepare an EA or EIS. Complete the following "State Environmental Recommendations" box indicating the need for an EA or EIS.

State NEPA Pathway Recommendation

I certify that a site inspection was conducted for each site involved in this proposal and to the best of my knowledge, the information provided in this LWCF Proposal Description and Environmental Screening Form (PD/ESF) is accurate based on available resource data. All resulting notes, reports and inspector signatures are stored in the state's NEPA file for this proposal and are available upon request. On the basis of the environmental impact information for this LWCF proposal as documented in this LWCF PD/ESF with which I am familiar, I recommend the following LWCF NEPA pathway:

- This proposal qualifies for a Categorical Exclusion (CE).
 - CE Item #:
 - Explanation:
- This proposal requires an Environmental Assessment (EA) which is attached and has been produced by the State/sponsor in accordance with the LWCF Program Manual.
- This proposal may require an Environmental Impact Statement (EIS). NPS guidance is requested per the LWCF Program Manual.

Reproduce this certificate as necessary. Complete for each LWCF appraisal or waiver valuation.

State Appraisal/Waiver Valuation Review

Property address: _____ **Date of appraisal transmittal letter/waiver:** _____

Real property value: \$ _____ **Effective date of value:** _____

I certify that: *a State-certified Review Appraiser has reviewed the appraisal and has determined that it was prepared in conformity with the Uniform Appraisal Standards for Federal Land Acquisitions.*

OR

the State has reviewed and approved a waiver valuation for this property per 49 CFR 24.102(c)(2)(ii).

SLO/ASLO Original Signature: _____ **Date:** _____

Typed Name, Title, Agency: Steve DeBrabander, Manager, Grants Management

Aggregate Industries Exchange Environmental Screening Form (3B – Sections 5 and 6)



Michigan Department of Natural Resources and Environment
Recreation Division – January 27, 2011

5. a) The 21,046-acre Waterloo Recreation Area is located in the northeast corner of Jackson County and the northwest corner of Washtenaw County, approximately at latitude 42° 30'N, longitude 84° 20'W. It spans six townships; Henrietta, Leoni, Waterloo, Grass Lake, Lyndon and Sylvan. The recreation area is confined on the north and east by M-52 and on the south by I-94. The western boundary is somewhat to the east of M-106. Waterloo Recreation Area can be accessed easily coming from the east and west by Interstate 94. There are a variety of exits on I-94 allowing access to Waterloo; exits 147 (Race Road), 150 (Mount Hope Road), 153 (Cedar Lake Road), 156 (Kalmbach Road), 157 (Pierce Road), and 159 (M-52). From the north M-52 is a convenient access road. Waterloo Recreation Area is adjacent to the 11,000-acre Pinckney Recreation Area on its northeast border. M-52 is the dividing line between the two Recreation Areas.

The 72.44-acre Converted Property (0.34%) proposed to be removed from public recreational use (temporary conversion greater than six months) is located in eastern Jackson County. The 324-acre Replacement Property is located adjacent to the Converted Property, immediately east and southeast. The Replacement Property is located in eastern Jackson County and western Washtenaw County. The address for the Waterloo Recreation Area headquarters is 16345 McClure Road, Chelsea MI 48118-9745.

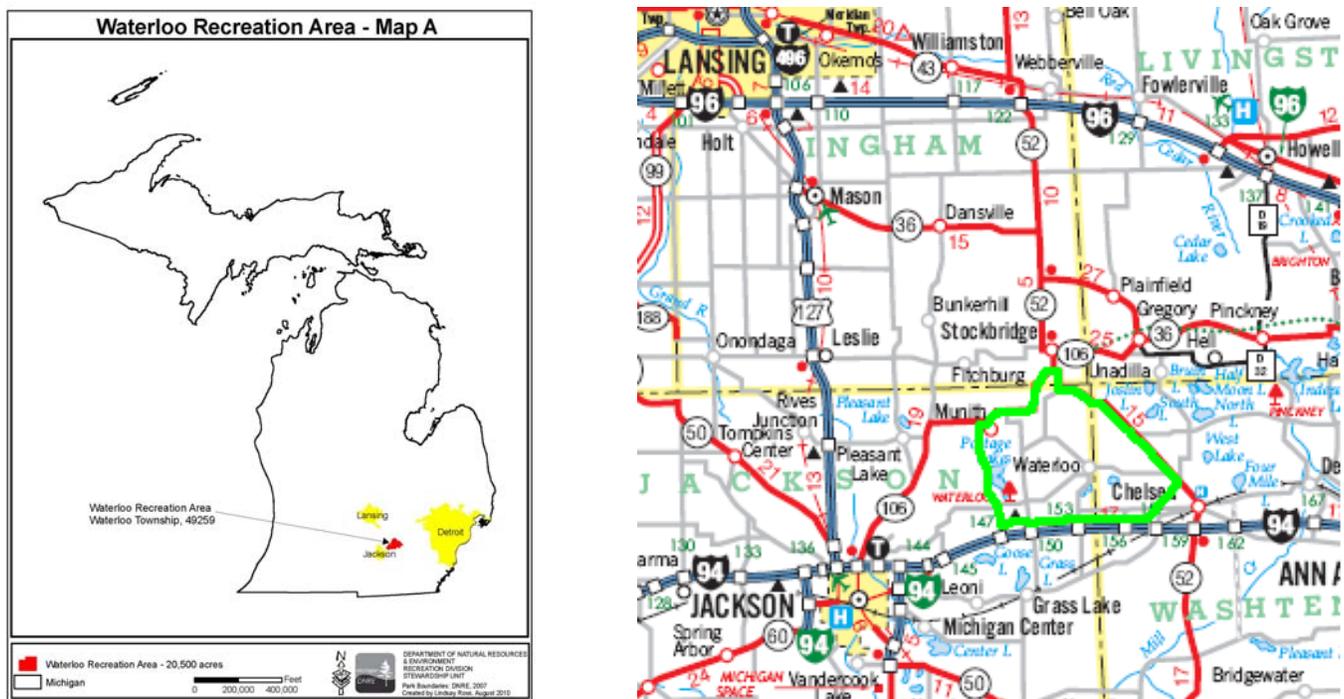


Figure 1. Location of the Waterloo Recreation Area

5. b) The parcel to be converted is 72.44 acres in size. A total of 20,973.56 (99.66%) acres of the recreation area will remain in public recreational use and will not be impacted by the conversion.

The 72.44 acres to be converted is an irregular-shaped parcel with rolling topography (typical kettle/kame ice contact topography) and a mix of old field and young woodland cover types. Long abandoned farm fields, which predate state ownership, are dominated by European pasture grasses, spotted knapweed and non-native shrubs such as autumn olive and bush honeysuckle. The young woodland is also dominated by non-native species. Much of the forested area is non-native black locust, with large areas smothered by invasive oriental bittersweet, which present an ongoing threat to the high quality oak-hickory forest and wetlands to the south, west and north of the property to be converted. A “forest” inventory was

performed using standard prism point sampling by forest stand. The results of the forest inventory are presented in Appendix A of the Environmental Assessment supports the above characterization.

At the conclusion of the non-metallic mineral lease the Converted Property will be returned to public recreational use as part of the Waterloo Recreation Area within the 6(f) boundary. Recreational opportunity will be equal to or greater to pre-conversion uses currently existing. The mineral lease will establish a ten year term with the possibility of time extension(s) based on market demand for the aggregate.

The property will be reclaimed to contours that resemble and blend with the hilly kettle and kame topography of adjacent recreation area lands. The Converted Property will be reclaimed primarily to oak-hickory forest with several inundated shrub swamp wetlands.

5. c) Jackson County was reported to have a population of 158,422 in the 2000 census, a 5.8% increase since 1990. The population density in Jackson County is 224.2 people per square mile. Washtenaw County reported a population twice that of Jackson County with 322,895 in the 2000 census, a 14.1% increase since 1990. The population density in Washtenaw County is 454.8 people per square mile. Both county populations exceed the state average of 175 people per square mile by a large margin, particularly Washtenaw County which reflects the growth surrounding Ann Arbor.

JACKSON COUNTY ECONOMIC CHARACTERISTICS	Number	%
EMPLOYMENT STATUS		
Population 16 years and over	122,154	100
In labor force	75,917	62.1
Civilian labor force	75,850	62.1
Employed	71,695	58.7
Unemployed	4,155	3.4
Percent of civilian labor force	5.5	(X)
Armed Forces	67	0.1
Not in labor force	46,237	37.9
Employed civilian population 16 years and over	71,695	100
OCCUPATION		
Management, professional, and related occupations	19,701	27.5
Service occupations	11,829	16.5
Sales and office occupations	17,613	24.6
Farming, fishing, and forestry occupations	281	0.4
Construction, extraction, and maintenance occupations	6,741	9.4
Production, transportation, and material moving occupations	15,530	21.7
INDUSTRY		
Agriculture, forestry, fishing and hunting, and mining	777	1.1
Construction	4,072	5.7
Manufacturing	16,887	23.6
Wholesale trade	2,454	3.4
Retail trade	8,665	12.1
Transportation and warehousing, and utilities	4,199	5.9
Information	1,399	2.0
Finance, insurance, real estate, and rental and leasing	2,831	3.9
Professional, scientific, management, administrative, and waste management services	4,057	5.7

Educational, health and social services	14,261	19.9
Arts, entertainment, recreation, accommodation and food services	5,024	7.0
Other services (except public administration)	3,419	4.8
Public administration	3,650	5.1

CLASS OF WORKER

Private wage and salary workers	58,987	82.3
Government workers	8,562	11.9
Self-employed workers in own not incorporated business	3,993	5.6
Unpaid family workers	153	0.2

INCOME IN 1999

Households	58,318	100
Less than \$10,000	4,293	7.4
\$10,000 to \$14,999	3,736	6.4
\$15,000 to \$24,999	7,399	12.7
\$25,000 to \$34,999	7,457	12.8
\$35,000 to \$49,999	10,620	18.2
\$50,000 to \$74,999	13,050	22.4
\$75,000 to \$99,999	6,585	11.3
\$100,000 to \$149,999	3,696	6.3
\$150,000 to \$199,999	662	1.1
\$200,000 or more	820	1.4
Median household income (dollars)	43,171	

WASHTENAW COUNTY ECONOMIC CHARACTERISTICS

	Number	%
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EMPLOYMENT STATUS		
Population 16 years and over	259,162	100
In labor force	179,279	69.2
Civilian labor force	179,189	69.1
Employed	172,373	66.5
Unemployed	6,816	2.6
Percent of civilian labor force	3.8	(X)
Armed Forces	90	0
Not in labor force	79,883	30.8

OCCUPATION

Management, professional, and related occupations	83,275	48.3
Service occupations	23,115	13.4
Sales and office occupations	38,976	22.6
Farming, fishing, and forestry occupations	507	0.3
Construction, extraction, and maintenance occupations	9,702	5.6
Production, transportation, and material moving occupations	16,798	9.7

INDUSTRY

Agriculture, forestry, fishing and hunting, and mining	1,047	0.6
Construction	6,762	3.9
Manufacturing	26,637	15.5
Wholesale trade	3,361	1.9
Retail trade	17,284	10
Transportation and warehousing, and utilities	5,834	3.4

Information	5,385	3.1
Finance, insurance, real estate, and rental and leasing	7,682	4.5
Professional, scientific, management, administrative, and waste management services	18,707	10.9
Educational, health and social services	56,181	32.6
Arts, entertainment, recreation, accommodation and food services	13,276	7.7
Other services (except public administration)	5,833	3.4
Public administration	4,384	2.5

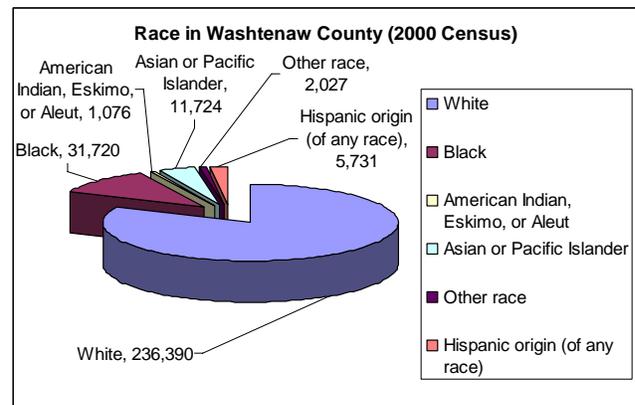
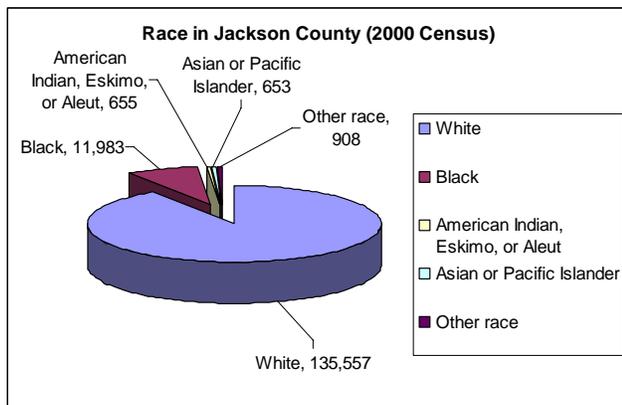
CLASS OF WORKER

Private wage and salary workers	132,125	76.7
Government workers	30,995	18
Self-employed workers in own not incorporated business	8,772	5.1
Unpaid family workers	481	0.3

INCOME IN 1999

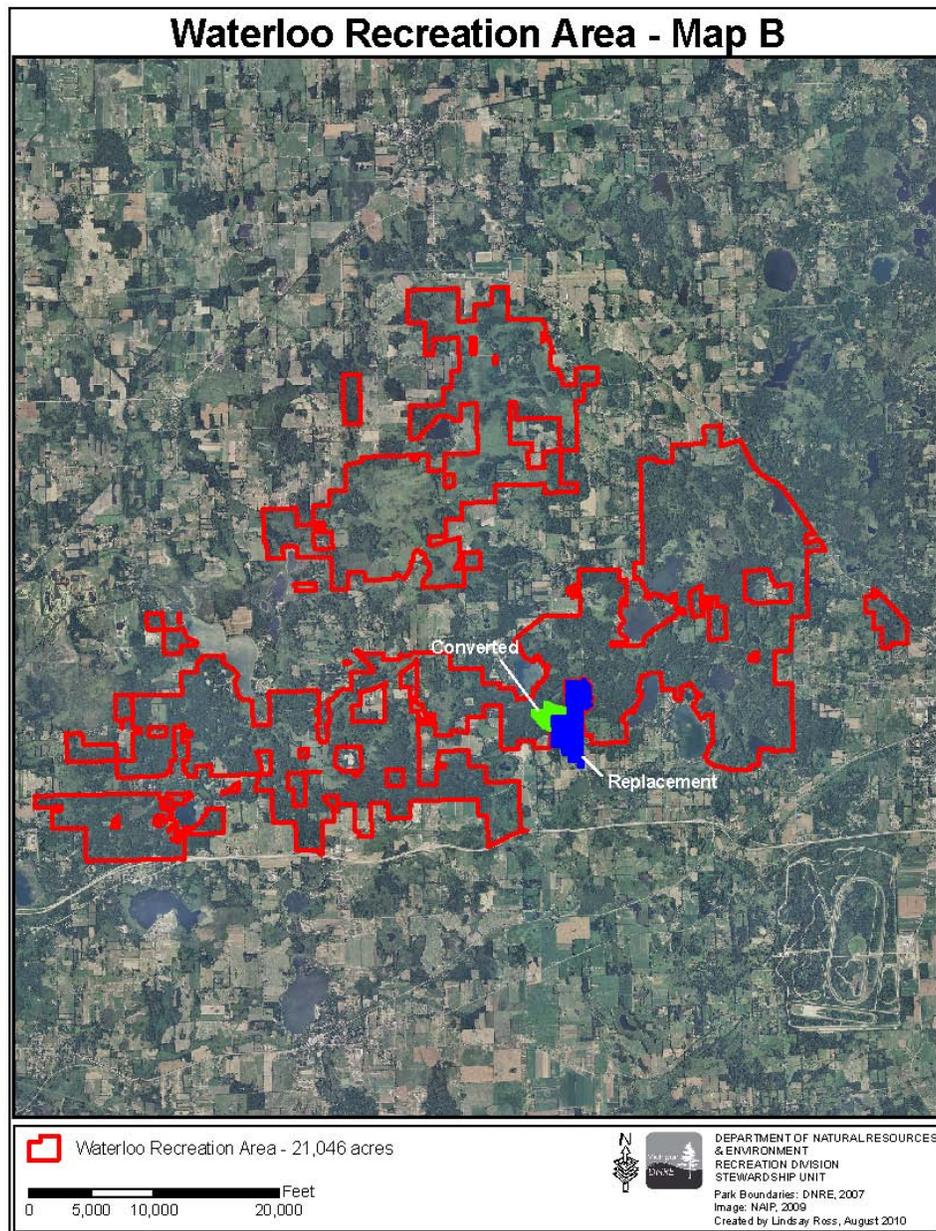
Households	125,465	100
Less than \$10,000	9,960	7.9
\$10,000 to \$14,999	5,715	4.6
\$15,000 to \$24,999	12,388	9.9
\$25,000 to \$34,999	13,577	10.8
\$35,000 to \$49,999	18,493	14.7
\$50,000 to \$74,999	24,139	19.2
\$75,000 to \$99,999	16,365	13
\$100,000 to \$149,999	15,960	12.7
\$150,000 to \$199,999	4,467	3.6
\$200,000 or more	4,401	3.5
Median household income (dollars)	51,990	

*(x) denotes less than 1%



Source: United States 2000 Census

5. d)



6. a) See Map B

The address for the Waterloo Recreation Area headquarters is 16345 McClure Road, Chelsea MI 48118-9745.

6. b) The 324-acre Replacement Property constitutes a significant inholding within the Waterloo Recreation Area. The property has multiple access points via road frontage on Loveland and Harvey Lake Roads. The land is currently a sand and gravel mining site with a processing facility located near the center of the parcel. The property includes 28 acres of extant natural wetland (emergent palustrine – emergent marsh) that connect to a larger marsh, 42 acres un-mined forest, 26 acres of filled gravel washing settling ponds, 30 acres processing facilities and a 12-acre pond. The remainder is being mined, is awaiting final reclamation or has been reclaimed.

At the time of the conversion at least 87 acres of the Replacement Property will be made available for public recreation. As mining is completed additional acreage will be made available for public

recreation. At the conclusion of the non-metallic mineral lease the entirety of the 324-acre Replacement Property will be open to the public for recreational use.

Currently there is an overhead electrical line which services Aggregate Industries' mining operation. At the conclusion of the non-metallic mineral lease the electrical line will be removed from both the Converted Property and the Replacement Property.

The property will be reclaimed to contours that resemble and blend with the hilly kettle and kame topography of adjacent recreation area lands. The northern portions of the property will be reclaimed to oak-hickory forest with a number of depression (to be restored to buttonbush swamp) and include a small lake with shallow emergent marsh margins (native plants). The southern portion of the property will be reclaimed to primarily to native grassland.

6. c) The Replacement Property is currently owned by Aggregate Industries. At the moment of conversion the Replacement Property will become property of the State of Michigan.

6. d) At the moment of conversion the Replacement Property will provide a minimum of 72.44 acres of public park land. The entire Replacement Property will also include un-mined wetland and uplands, and reclaimed aggregate mine. The land will provide dispersed recreation opportunities, hiking, hunting, bird watching, etc. equal to or greater than the Converted Property. Other recreational uses such as equestrian trail may be developed in the future in accordance with our Management Planning Process. A developed public parking area (a minimum of 10 spaces) will provide improved physical access to the Replacement Property. The Converted Property has only roadside parking and an informal 1-2 car "pull-off".

As phases of mining are completed additional acreage will be open to public recreation. At the conclusion of the non-metallic mineral lease, the entire reclaimed and restored 72.44-acre Converted Property and the entire reclaimed and restored 324-acre Replacement Property will be open to public recreation.

6. e) The Replacement Property will be incorporated into the Waterloo Recreation Area. It will be owned in fee by the State of Michigan and administered by the DNRE, Recreation Division.

6. f) The Replacement Property will be incorporated into the Waterloo Recreation Area. It will be included in the 6(f) boundary. At the conclusion of the non-metallic mineral lease the Converted Property will be re-included into the 6(f) boundary.

6. g) Conversion of the 72.44 acres will occur simultaneously with the State of Michigan taking ownership of the 324-acre Replacement Property and the signing of a non-metallic mineral lease. The lease will allow Aggregate Industries to complete mining on no more than 237 acres of the 324-acre Replacement Property and the 72.44-acre Converted Property which remains in state ownership. At the moment of the signing of the non-metallic mineral lease, the Replacement Property will provide a minimum of 87 acres of public park land, located on the southern portion of the Replacement Property, where mining and reclamation is complete. As phases of mining are completed additional acreage will be opened to public recreation. At the conclusion of the non-metallic mineral lease, the entire 72.44-acre Converted Property and the 324-acre Replacement Property will be open to public recreation.

The exact date of issuance of the non-metallic mineral lease is not known, but is anticipated in early 2011.

6. h) See Map B above. At the conclusion of the non-metallic mineral lease, the new 6(f) boundary will include both the Converted Property and the entirety of the Replacement Property. At the moment of the signing of the non-metallic mineral lease, the Replacement Property will provide a minimum of 87 acres

of public park land to be included in the 6(f) boundary. This 87-acre parcel is located on the southern portion of the Replacement Property, where mining and reclamation is complete. As phases of mining are completed additional acreage will be opened to public recreation and included in the 6(f) boundary.

Aggregate Industries Exchange Environmental Screening Form Comments



Michigan Department of Natural Resources and Environment
Recreation Division - January 27, 2011

1. The Converted Property

The Converted Property will be mined for sand and gravel under a 10 year lease with the possibility of extensions based on market demand for the aggregate. An estimated 8 to 9 million tons of non-metallic minerals may be mined from the Converted Property during the lease period.

The ice contact landform of the Converted Property formed where the Lake Erie and Saginaw Bay lobes of the Laurentide glacial ice sheets (Wisconsin Advance) collided and piled up irregular sand and gravel ridges between them. The landform of the property will be altered, but the post mining contours and slopes will be sculpted to be comparable to those found in the surrounding Interlobate Region (see Environmental Assessment Appendix O). Shallow depressions will be created to mimic glacial kettle depressions (buttonbush swamp).

The Replacement Property

The ice contact landform of the northern one-third of the Replacement Property – has been altered by aggregate mining. As a lease requirement, the post mining contours and slopes will be sculpted to be similar to those found in the surrounding Interlobate Region. Shallow depressions will be created to mimic glacial kettle depressions (buttonbush swamp).

The landform of southern two-thirds of the Replacement Property is glacial outwash and post glacial alluvium. The mining has not significantly altered the landform in this area. (See Environmental Assessment Appendix O).

2. The Converted Property and The Replacement Property

(See also Environmental Assessment – 4.6 Air Quality)

The proposed project will produce insignificant emissions with the burning of diesel fuel by surface mining equipment. Insignificant adverse air quality effects are anticipated to occur from this source.

“Aggregate Industries will be operating the proposed mine in compliance with the MDNRE General Permit-to-Install for Nonmetallic Mineral Crushing Facilities. Fugitive dust contributing to the particulate matter contaminant would be of primary concern. Aggregate Industries has extensive experience with dust control on aggregate mining operations throughout the region. The permit the mine will operate under contains low emission limits on fugitive dust, which is measured as visible emissions. The conditions of the permit as they apply to production limits, equipment maintenance, and visible emissions, will be strictly adhered to during the life of the mine. It is therefore expected that the proposed mine operation will not cause any adverse air quality impacts or negatively impact any adjacent properties”

Waterloo Township Environmental Impact Report February 26, 2010

Aggregate Industries - Chelsea Mine Site

Waterloo Township, Jackson County, MI

Page 15

JFNew Project No. 1002021

Given the property’s proximity to highway projects, it is likely that significant savings in fossil fuel consumption and CO₂ production will be realized.

3. Converted Property

(See also Environmental Assessment – 4.3 Noise)

Noise will be produced by machinery during aggregate mining of the Converted Property and a portion of the 324-acre Replacement Property. Articulated front-end loaders will be the primary means of excavation. Material may be placed into a mobile field crusher located near the point of excavation. This portable primary crushing unit will only crush over sized materials; less than one percent of the materials placed in the unit. Representatives from MDRE, Recreation Division were able to carry on conversation at normal voice levels, while observing active mining with an operating mobile field crusher at a distance of approximately 75 yards. Sand and gravel will be transported to the existing Aggregate Industries processing plant by conveyor(s). The conveyor system makes very little noise. Normal voice conversation is possible within feet of the conveyor. Aggregate Industries has modified the “backing-up” warning beacons on their mobile equipment from the familiar repetitive loud “beep” to a sound that mimics the loud call of a sandhill crane (wading-bird).

Aggregate Industries currently operates a non-metallic mineral crushing facility under a special land use permit issued by Waterloo Township, along with an annual operating permit, also issued by the township (EA – Appendix C). Material mined from the Converted Property will be processed at the facility. The parameters of the crushing facility and its location will not change. Therefore, noise levels are not expected to change from current levels and have not been the subject of complaints.

Gravel trucks will exit the processing facility using existing routes. Noise levels from gravel trucks are not expected to change. Truck traffic associated with aggregate mining will be similar to extant levels on Loveland and Harvey Lake Roads, which varies with the volume of aggregate need to fulfill contracts. Truck traffic associated with Aggregate Industries’ mining will be eliminated at the conclusion of the mining lease.

The Converted Property is surrounded by Aggregate Industries and State land. The nearest residences are located greater than a quarter mile from the Converted Property to the northwest. A combination of hilly topography, prevailing wind direction and heavily forested plant communities ameliorate noise disturbance.

Section 9.06 of the Waterloo Township Sand and Gravel Extraction Ordinance requires that noise must be controlled so as not to cause a nuisance or hazard to any adjoining property or public road. Aggregate Industries will comply with this local ordinance. The DNRE non-metallic mineral lease requires compliance with local ordinances and permits. Should noise ever become an issue, residents will have two sources of remedy, the DNRE and Waterloo Township. It is anticipated that all proposed activities associated mining the Converted Property will be a negligible increase over existing levels.

Replacement Property

Noise will be produced throughout the lease period by normal operation of Aggregate Industries existing processing facility located on a portion of the Replacement Property. Noise will be similar to current levels. The plant will be in operation for approximately 30 weeks each year. The annual duration of operation will be determined by the market demands for material. Generally, the plant will be in operation between April and the end of October each year. Daily operation will generally occur between the hours of 7 a.m. and 7 p.m., Monday through Friday in accordance with township ordinance requirements. Noise creation will diminish in the majority of the Replacement Property as mining and reclamation conclude.

4. Converted Property

(See Also Environmental Assessment – 4.4)

There are no wetlands (**National Wetlands Inventory**) or surface waters (ponds, streams) extant on the Converted Property. Approximately 5.5 acres of wetland will be created on the Converted Property.

The Converted Property is upland and not within a 100-year floodplain – (Federal Emergency Management Agency (FEMA) floodplain map)

Impact to surface water quality on the Converted Property will be negligible. Runoff from rainfall or snowmelt will be routed to depressional areas and remain on site. Special attention will be given not to allow surface runoff from the proposed site to affect adjacent properties.

A **Soil Erosion and Sedimentation Control Permit** will also be required for mining on the Converted Property. This is a State permit issued by Jackson County. The required soil erosion and sedimentation control measures will prevent adverse runoff or erosion.

Fuel for on-site vehicles and mining equipment will not be stored on the Converted Property. Fuel will be stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at Aggregate Industries' existing processing plant. Refueling of equipment will not take place on the Converted Property, but instead will be refueled at Aggregate Industries' re-fueling area located at their processing facility. This site is audited on a yearly basis. Fuel storage and the re-fueling station are in compliance with DNRE requirements and a DNRE, "No Spill, Prevention, Control and Counter Measures Plan" is in place (Appendix D of the Environmental Assessment).

Material mined on the Converted Property will be transported via conveyor belt to Aggregate Industries' existing processing facility. Aggregate Industries' wash facilities and lagoon system have been used to process aggregate for many years without impact to local hydrology, wells or surface water quality. The effluent discharged is rinse water used to wash gravel. Water drawn from an existing created lagoon is used to wash gravel. The wash water is then returned to flow through a series of lagoons, where the fine materials (clay particles and stone fines) settle out. The wash water eventually re-enters the original lagoon where it is used again. No chemicals are used in the process. Suspended solids in the wash water do not pose a groundwater or surface water threat. Sediment is unable to migrate beyond the lagoons. The created pond north of Green Road is over five acres in size. As a consequence, the use of surface water is permitted under **DNRE Inland Lake Permit 06-38-0043P11** (issued 4-5-2007 and expires 4-5-2012) (Appendix E of the EA). An annual report is a requirement of this permit. Aggregate Industries also has a General Ground Water Permit to discharge wash water back into the pond (DNRE permit GW-151-0083 issued April 1, 2010, EA – Appendix F).

Potential effects on groundwater quantity and nearby surface water features were assessed by Aggregate Industries' consultant JFNew, Inc. After reviewing groundwater data, well records, soil survey, and soil boring data, JFNew concluded that there would be no adverse affect on local hydrologic features such as wells, wetlands, lakes, or streams as a result of mining on the Converted Property.

The closest water wells are 1,500 – 2,000 feet from the closest edge of the Converted Property (DNRE Water Well and Pump Records, Wells 1573-1575, 1568-1570, 3668, 5660 and 5990).

Mining on state land will stop above the groundwater level (approximately 980 feet), except for the creation of several shallow ponds, 0.5–1.5 acres in size and less than 4 feet deep (976 feet) which will

be created at the request of the DNRE. These ponds will approximate naturally-occurring glacial “kettle” ponds with the restoration goal of establishment of a buttonbush swamp (inundated shrub swamp) community.

Sand and gravel mining has some potential to increase the vulnerability of an aquifer to be contaminated, because it decreases the distance between the groundwater table and the land surface. Possible contaminants include lubricants and fuels. Fuel for on-site vehicles and mining equipment will not be stored on the State land (Converted Property) to be mined. Fuel will be stored in above-ground storage tanks equipped with secondary containment to prevent leakage or spillage at Aggregate Industries existing processing plant. Necessary lubricants for mining and processing equipment will be brought to the Converted Property in small containers on service vehicles. Handling and storage of petroleum products will be conducted in accordance with all applicable local, state, and federal regulations and should have no adverse impacts on water quality. The threat of contamination is considered less than that for agricultural land. Once mining is complete this minor threat ends.

At the conclusion of mining the Converted Property will be restored with native vegetation and return to recreational use, which will provide additional protection to groundwater.

Chemicals are not used to mine or process the gravel. Only water is used to process (wash) gravel within a closed lagoon system. Only naturally occurring glacial materials, sand and gravel will be mined from the State land.



Mining operations will not affect the level of nearby Clear Lake. Local residents have voiced the concern that the lake could be drained. The surface elevation of Clear Lake is approximately **12 feet lower** than the groundwater table beneath the state land to be mined (Figure L). Exploratory borings on the State land to be mined have determined that the groundwater table is between 979 feet and 981 feet above sea level. This correlates with groundwater data from the **Michigan Groundwater Mapping Project**. The surface of Clear Lake is 968 feet above sea level. If there is a hydrologic connection between the groundwater beneath the state land to be mined and Clear Lake, groundwater would tend to move towards the Lake.

EA – Figure L: Groundwater Contour Map

Replacement Property

Aggregate mining on the Replacement Property has occurred for over 30 years. During this time neither ground water nor surface water has been negatively impacted, with the exception of settling ponds created as part of the gravel mining process. These ponds will become upland habitat at the

conclusion of the lease period. Ground water is used to wash aggregate is recycled through a settling pond system.

5. There are no streams on the Converted or Replacement properties
6. Not applicable
7. Converted Property

No wetland or floodplains exist on the Converted Property. Approximately 5.5 acres of inundated shrub swamp will be created on the Converted Property.

Replacement Property

A 28-acre wetland is extant on the Replacement Property that was not impacted by previous aggregate mining. This wetland will be part of the Replacement Property open to public recreational use at the time of conversion. At the conclusion of the mining a 12–16 acre pond will exist with a broad wetland margin several acres in size. Approximately 5 acres of inundated shrub swamp will be created on the Replacement Property by the conclusion of the mining lease. Extant settling ponds are expected to become upland at the conclusion of mining, but may have some wetland character with fine silt and clay soil.

8. Converted Property

The Converted Property will remain part of the Waterloo Recreation Area and will be surrounded on all sides by the recreation area. Property values are not expected to be affected significantly.

Replacement Property

The entire 324-acre Replacement Property will become a part of the Waterloo Recreation Area. Property values are not expected to be affected significantly.

9. Converted Property

Aggregate mined on the converted and replacement properties will be used to re-build Michigan roads, including Interstate 94, a vital link between Chicago and Detroit.

Transportation will not be significantly affected. Truck traffic associated with aggregate mining will be similar to extant levels on Loveland and Harvey Lake Road. Truck traffic will associated with the mining will be eliminated at the conclusion of the mining lease.

Replacement Property

Transportation will not be significantly affected. Truck traffic associated with aggregate mining will be similar to extant levels on Loveland and Harvey Lake Road. Some increase in traffic associated with increased recreational use may occur. Because the area is used for dispersed recreation the increase is not anticipated to be significant (hunters, hikers, bird watchers). A small parking area may be developed on Harvey Lake or Loveland road to accommodate recreational use.

10. Converted Property

See DNRE, Endangered Species Coordinator memorandum (EA – Appendix G)

Replacement Property

See DNRE, Endangered Species Coordinator memorandum (EA – Appendix G)

11. Not Applicable

12. Converted Property

The Converted Property does not provide unique or important wildlife habitat (EA – Appendix G)

Replacement Property

The Replacement Property does not provide unique or important wildlife habitat (EA – Appendix G)

13. Converted Property

The Converted Property does not provide unique or important fish habitat (EA – Appendix G)

Replacement Property

The Replacement Property does not provide unique or important fish habitat (EA – Appendix G)

14. Converted Property

The conversion will not introduce or enhance invasive species beyond those extant on the property and the Waterloo Recreation Area. The property is heavily infested with invasive plants. Mining and restoration with appropriate native plants will actually protect nearby higher quality natural areas. Post mining restoration will return the area to native oak-hickory forest community with emphasis on the control of invasive plants.

Replacement Property

The conversion will not introduce or enhance invasive species beyond those extant on the property and the Waterloo Recreation Area. Restoration with appropriate native plants is planned, which includes the control of non-native plants and invasive species.

15. Converted Property

Recreational opportunities will be lost on the Converted Property for as long as 10 years. However, the Replacement Property will provide greater recreational opportunity at the time of conversion. There will be no net loss of recreational opportunity. (See EA Chapter 4).

Replacement Property

At the time of conversion at least 72.44 acres of the Replacement Property will be available to the public for dispersed recreational use similar to that offered by the Converted Property. At the conclusion of the mining lease all 324 acres of the Replacement Property and the 72.44 acres of the converted land will be available for recreational use. (See EA Chapter 4).

16. Accessibility for populations with disabilities will not change. Should recreational infrastructure be developed on the converted or Replacement Property, it will be of universal design that meets or exceeds ADA requirements.

17. Converted Property

The overall aesthetics will be impacted by clearing and aggregate mining. Once completed and restored with appropriate native vegetation, aesthetics will begin to recover. Because the Converted Property is young forest and old field, dominated by non-native plants, given time the aesthetic should greatly improve and be appropriate to the natural heritage of the area. The vantage point at the top of the ridge that is the north boundary of the Converted Property will be retained. Views are expected to be more dramatic as the mining will have the effect of making the ridge seem higher in elevation because of the greater distance from the toe of the slope to the ridge top.

Replacement Property

The aesthetics of the Replacement Property will continue to improve as mining and ecological restoration is completed. Restoration will restore the 324 acres to native natural communities (oak-hickory forest, buttonbush swamp, emergent wetland and prairie).

18. See State Historic Preservation Office and State Archaeologist's letters.

19. Conversion of the 72.44 acres will protect mining jobs for the period of the lease. At full production capacity this operation has seven full-time employees, the facility may also employ a part-time crew of six additional workers. The current operation has consistently generated over \$150,000 per year in State sales taxes. Real Estate and Personal Property Taxes generated by the operation exceeded \$41,000 in 2009. The mining operation requires few services from Waterloo Township and the current operation pays annual township fees exceeding \$5,000 for services required to renew its Operating Permit. It is expected that this current tax base, with employment, will continue for the life of the lease.

20. The conversion/replacement will have no affect positive or negative on minority and low income populations. The 324-acre addition to the Waterloo Recreation Area will increase recreational opportunities for all people.

21. Fossil fuels will be consumed by mining equipment and processing facility. If the need for aggregate is not met in this location, it will be met elsewhere. Given the property's proximity to highway projects, it is likely that significant savings in fossil fuel consumption and CO₂ production will be realized.

22. The 324-acre Replacement Property will be a significant addition to the Waterloo Recreation Area. This acquisition will contribute to the DNRE's Land Consolidation Strategy as it is with the State's acquisition boundary of the Waterloo Recreation Area. It eliminates nearly three miles of public/private boundary interface. The management plan (draft) for the Waterloo Recreation Area also recognizes the importance of acquisition of the Replacement Property and its importance to the integrity of the recreation area. It is a large inholding that juts into the heart of the Waterloo Recreation Area. If the state is unsuccessful in acquiring the Replacement Property, it is highly likely that Aggregate Industries will develop residential housing. Residential housing would fundamentally alter the recreational experience and use of a major part of the Waterloo Recreation Area.

23. Converted Property

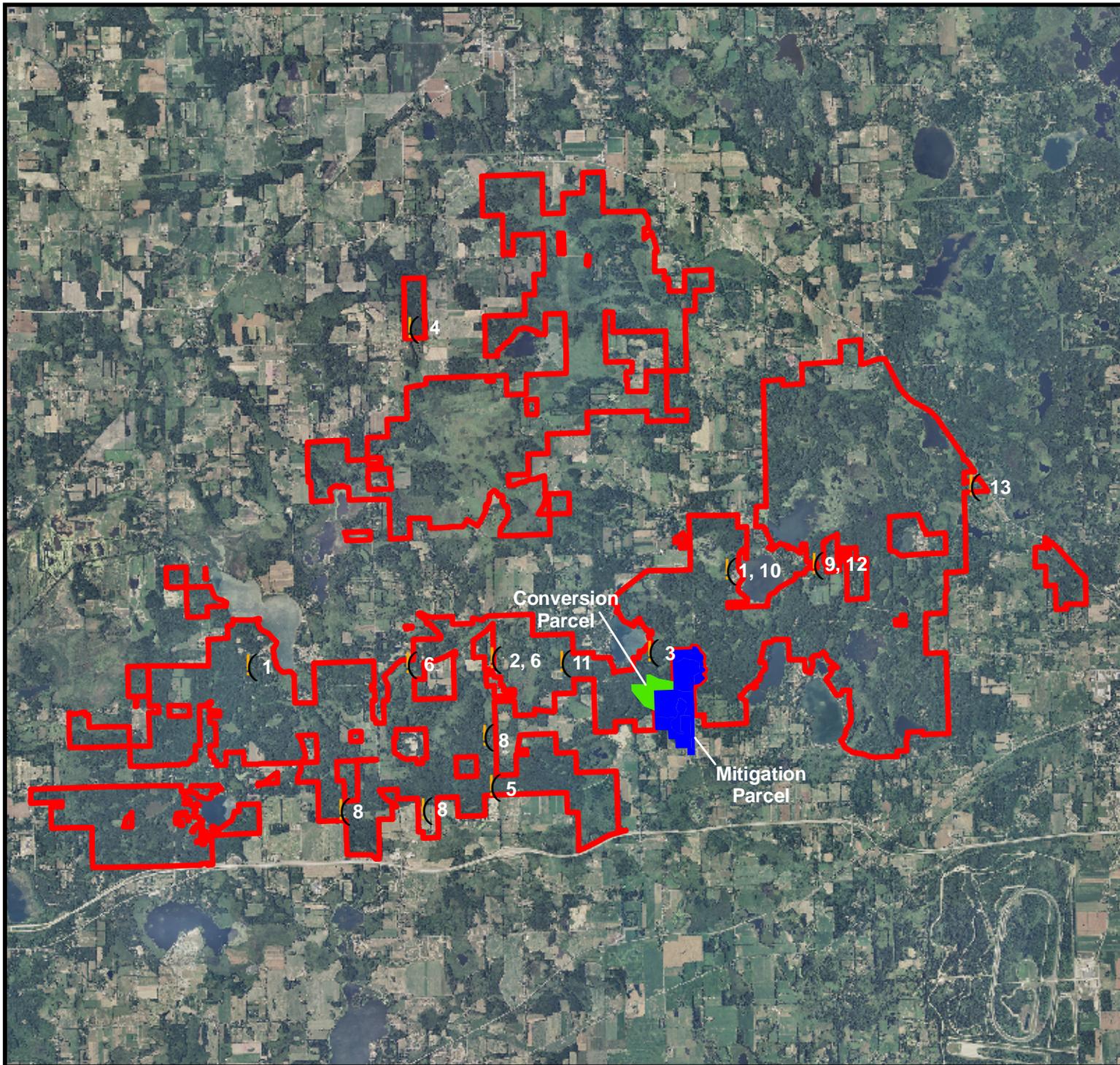
Not Applicable

Replacement Property

There is no history of environmental contamination associated with Aggregate Industries' operations.

24. If the conversion does not occur, Aggregate Industries will likely implement plans to sub-divide and develop the 324 acre Replacement Property for residential housing. Concept plans have been drawn. A large residential development in the heart of the Waterloo Recreation Area would change the nature of the recreational experience in fundamental negative ways and have negative environmental effects.

Waterloo Recreation Area - Map B



 Waterloo Recreation Area (20,500 acres)

LWCF Project List - 1965-2001

Ref. #	Project No.	Acquisition/Development	Project Description
1	26-01569	Development	Play Equipment
2	26-01037	Acquisition	Acquired 324 acres
3	26-00726	Acquisition	Acquired 80 acres
4	26-00919	Acquisition	Acquired 86.45 acres
5	26-00578	Acquisition	Acquired 201.12 acres
6	26-00554	Acquisition	Acquired 33.5 acres
7	26-00468	Development	Comfort Station Facility
8	26-00253	Acquisition	Acquired 15 acres
9	26-00194	Acquisition	Acquired 118 acres
10	26-00184	Development	Development of Sugar Loaf Campgd.
11	26-00095	Acquisition	Acquired 306 acres
12	26-00080	Development	Construction on Sugar Loaf Lake
13	26-00410	Acquisition	Acquired 159.3 acres

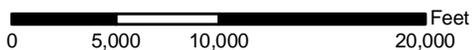


DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENT
RECREATION DIVISION
STEWARDSHIP UNIT

Park Boundaries: DNRE, 2007

Image: NAIP, 2009

Created by Lindsay Ross, August 2010



Waterloo Recreation Area - Map C

