A Student's Course Guide

for

BIO 488/588: Environmental Impact Analysis

Taught by

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Environmental Science Program
SUNY College at Brockport

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Acknowledgments

Introduction

Welcome

This Guide is designed to: 1) provide you with a central source of administrative and content information about BIO 488/588, Environmental Impact Analysis, and 2) help you study and produce effectively as you master the content presented in this course. By frequently consulting this guide and using it as a valued reference source, you will find information and due dates for all important aspects and assignments of the course plus detailed outlines for lectures.

Purpose

This course will teach you about principles of environmental analysis, how to prepare an environmental impact statement, and about environmental issues in the Great Lakes ecosystem. It is assumed that you have had at least one college-level ecology course or some background in general science before attempting this course.

Together with the other aquatic science courses offered at SUNY Brockport (Limnology, Population Biology, Fishery Techniques & Indentification, Fish Ecology, Aquatic Invertebrates, Pollution Biology, Water Quality Analysis, Hydrology, Groundwater), this course will provide information useful to prepare for graduate study, professional employment, or state/federal civil service examinations in environmental science. Students interested in pursuing a career in environmental science should speak to me about specialized graduate programs at other universities and professional employment opportunities in these fields.

Goals

It is my hope that at the end of this summer session you will understand the principles and procedures of environmental analysis sufficiently well so that you can: 1) write an environmental impact statement for an employer, and 2) participate as a knowledgeable citizen in your local community to deal effectively with development and other environmental issues. You should also understand some key environmental issues in the Great Lakes ecosystem.

Course Information

Meetings

Course: BIO 488/588: Environmental Impact Analysis
Semester: Summer 2002, Session I, May 20 - 31
Time: 9:00 am - 5:00 pm; Monday through Friday
Place: 118 Lennon Hall

Office

Hours: During regular class time
Place: 121 Lennon Hall
Telephone: 716-395-5783
E-Mail: jhaynes@brockport.edu

I will be happy to discuss any aspect of the course or your performance with you during class meetings. In particular, you should come to me as soon as you perceive that you may be having difficulty with any aspect of the course.

Text

  Bregman, J.I. 1999. *Environmental Impact Statements* (2nd Ed.). Lewis Publishers. Boca Raton, FL.

Syllabus

     Week 1

Mon, May 20
 am: Introductions: Course, Participants, Environmental Analysis/NEPA
 pm: Tour Project Area; Preliminary Scoping
   <u>Assignment</u>: SEQRA/Permit Materials; Bregman--Chapters. 1, 2
Tue, May 21
 am: EIA/EIS Procedures
 pm: Organize and Work on Team Special Projects
   <u>Assignment</u>: SEQRA/Permit Materials; Bregman--Chapter 3
Wed, May 22
 am: Teams Identify and Summarize Laws and Regulations Relevant to the Project
 pm: Regulatory Perspective: SEQRA, Permits, Scoping the Class Project
   (Mr. Albert Butkas, NYSDEC, retired)
   <u>Assignment</u>: This Guide, p. 1-15; Bregman--Chapter 6
Thu, May 23
 am: Assessing Environmental Impacts
 pm: Work on Team Special Projects
   <u>Assignment</u>: Bregman--Chapter 7
Fri, May 24
 am: EIA/EIS Methodologies; Teams Prepare Environmental Impact Assessment (EIA)
 pm: Teams Complete EIA; Make Positive or Negative Declaration; **Quiz #1**

     Week 2

Mon, May 27
   NO CLASS--Memorial Day Holiday
Tue, May 28
 am: Complete Team Special Projects
 pm: Teams Organize and Tabulate Information for EIS; Develop EIS Outline
Wed, May 29
 am: Citizen Participation in EIA; Present Special Projects to Class
 pm: Teams Begin Drafting EISs
   <u>Assignment</u>: Bregman--Chapter 4
Thu, May 30
 am/pm: Teams Complete Drafting EISs
Fri, May 31
 am: **Quiz #2**; Permit Hearing Preparation
 pm: Permit Hearing (Mr. Albert Butkas, NYSDEC); Complete and Turn In Team EISs

Class Work

Class begins at 9:00 am, Mon - Fri, unless I state otherwise for a particular day. Class will end as close to 5:00 pm as possible after we clean up following each day's activities. You will need a notebook to jot down ideas about the environmental analysis you will do.

A typical day will begin with a morning lecture/discussion on environmental impact analysis followed by an afternoon of work on a student team activity. My formal lectures will use overhead transparencies reproduced at the end of this Guide. A guest expert on the legal and regulatory aspects of environmental analysis will also contribute to two sessions. You are expected to ask questions on material you do not understand and to participate fully in class discussions of questions raised by me, our guest or other students.

Studying

It is important that you study regularly during the evenings between classes and over weekends. Take notes on key points and processes discussed in readings and in class. Review and annotate your notes each evening after each class. This course covers much material quickly. If you do not understand something, see me. Do not fall behind!

I recommend that you use your EIS team as a study group to prepare for quizzes. Small study groups will help you to improve your performance no matter what your native ability is. Even students who understand the material well can reinforce and deepen their understanding by explaining and teaching concepts and techniques to others.

Attendance

College Policy: "The student is responsible for all assigned course work and can not be absolved of this responsibility. When enrolled in a particular course, the student is obligated to do all of the work assigned. Punctual and regular attendance is vital to the discharge of this obligation. Absences, excused or not, do not alter this responsibility. Absences will be excused for (a) documented illness, (b) official representation of the college, (c) death of a close relative, (d) religious holiday, and (e) other circumstances beyond the control of the student. Substantiation of excused absences is the responsibility of the student. Excuses for official representation of the college must be obtained from the official supervising that activity or event. Absences deemed excessive by the instructor may result in a lowered grade. Students whose unexcused absences exceed 15% of the scheduled classes and laboratories will be subject to failure at the instructor's discretion. Regulations more restrictive than those stated above, but not in conflict with them, may be established by the instructor for any course. Instructors are responsible for

distributing this attendance policy, and any additions, in writing during the first class meeting".

My Policy: Because of the diversity and pace of the material presented, it is vital that you attend and be prepared to participate in each class meeting. In terms of this course, the 15% absentee limit described above translates into 1.5 days. Thus, if you have 2 or more <u>unexcused</u> absences, you will earn an E in this course, regardless of your actual grades. A very important reason for your attendance is the dependence of your EIS team on your knowledge and effort. Don't let your team down.

In sum, you are expected to attend and participate in all class meetings, take quizzes and hand-in written assignments on the dates specified by me. Valid absences will be excused if you consult

with me before an absence. Otherwise, I will require a valid written excuse (e.g., doctor's note) before you will be permitted to make-up a missed assignment. No exceptions.

Grading

Quizzes (2)	20%
EI Assessment	10%
Team Project	10%
Permit Hearing/Role Play	10%
EI Statement	50%

It is possible for you to earn a total of 200 points during the course (multiply the percentage value of each assignment by 2 to determine how many points it is worth). Your final letter grade for the course will be assigned according to the following percentage scale (divide the total number of points you earn by 2):

	Undergraduate	Graduate
A	90 - 100%	92 - 100%
B	80 - 89%	82 - 91%
C	70 - 79%	72 - 81%
D	60 - 69%	
E	0 - 59%	0 - 71%

Plusses and minuses will be awarded to students with final percentages near the upper or lower ends of these ranges, respectively. Graduate students can not earn D's at Brockport.

Tests

Quizzes will consist of short essay, definition and other questions designed to evaluate your understanding of and ability to use key concepts, ideas and processes discussed in lectures and assigned readings. If you can answer competently the Study Questions presented later in this Guide, you should have no trouble with quizzes. Note that quizzes are a relatively minor component of the final grade. Assignments directly related to the team EIS will comprise 80% of your final grade.

Drops

You may drop this course without academic penalty (there is a financial penalty imposed by the College) until the date specified by the college. **I strongly recommend that you drop this course on day 1 if you are so inclined. Otherwise, you will let your team down severely. Also, there are people on a waiting list for this course.** After **the middle of week 1**, you must request permission from me, in writing and in person, to withdraw from the course. According to College policy, withdrawals after mid-semester are granted only for reasons of prolonged illness or unusual circumstances. The Department of Biological Sciences is very strict in these matters. Under no circumstances will I or my Department Chairperson grant permission to withdraw for academic reasons (e.g., failing grades, dislike of course, changing major, etc.).

Handicaps

If you have a physical or mental handicap, a diagnosed learning disability or concerns about study skills/academic performance that may affect your progress in this course, please

discuss this with me in private immediately. It may be possible for me to help you obtain special assistance to facilitate your successful completion of this course.

The Writing Process

Overview

Coherent, clear and technically correct writing is a major ingredient for success in a career in environmental science. Writing in BIO 488/588 will require the same skills you have employed in previous courses plus content knowledge of this course. Below I review each of the steps you should take while preparing your sections of the team environmental impact statement or any written work for this or other courses.

Steps

1. *Thinking*: explore the problem by brainstorming, free association, jottings or scratch outlines; recall and record any information that comes to mind about the topic; don't worry about organization, spelling, etc. in this step.

2. *Research and Note Taking*: use the class reference library, lecture notes, field trips, personal experiences, interviews, or references in the library as resources for developing information, facts and ideas for your sections of the team EIS.

3. *Organize*: prepare a list of main points and subpoints in logical order that you will address in your EIA or EIS sections; this is an outline.

4. *Verify Topic*: compare the original assignment with your outline; have you addressed all aspects implied in the assignment questions?; have you eliminated extraneous topics not asked for in the assignment?

5. *Write a Complete 1st Draft*: this must be done using a word processor (there is a PC center in 105 Lennon); rework the draft until you are satisfied that it is correct grammatically and says what you want it to say to meet fully the requirements
of the assignment; does the draft follow your outline?

6. *Seek Peer Review*: use your EIS team members to review your writing; based on the peer review and your own judgement, revise your documents appropriately.

7. *Write Final Draft*: the final writing produced should be neat, clear, concise and follow all assignment guidelines.

Criteria for Good Writing

General Impression: Good writing begins with good thinking, i.e., knowing exactly what you want to say, and then expressing yourself clearly and directly. Coherent and correct organization, style, grammar, sentence structure, paragraphing and other mechanical components of good writing are essential to producing high quality written work, but they will never hide or make up for muddled or incoherent thinking. Clear thinking and correct exposition are the foundations of all successful writing. Furthermore, whether you have produced a high quality product or not usually will be apparent in your first paragraph.

Content Evaluation: Your paper should address clearly all factors relevant to an EIS and the project you are evaluating. Key terms and concepts should be defined explicitly. You should introduce appropriate information to support your discussion (facts, principles, examples from lectures/texts/journals, illustrations, etc.). Personal opinions, experiences and values also may be appropriate, but the relevance of any material used to support your main idea(s) or thesis must be

clear. Finally, and most importantly, you must say some meaningful things, i.e., have some good, thoughtful ideas. In short, I should find your work interesting to read.

Organization: Organization is the key to presenting content coherently. It defines the overall plan and direction of your work, and will provide a sense of unity, continuity and coherence. Organization of the EIS follows the eight CEQ categories discussed in class. Within the EIS, each paragraph addresses one topic that is related to the CEQ category. The content of each paragraph is related to a sub-thesis stated in its first sentence (topic sentence) and contains no irrelevancies, asides or information not related to the topic sentence.

Language and Style: The kinds of words selected and their use should be appropriate for your topic and purpose. Cliche's and vernacular expressions are not appropriate for rational discussion of the issues that you will write about. You should clearly distinguish among facts and opinions; the tone of your writing should be reasonable and unbiased. Avoid unneeded words, repetition of phrases and redundant content. Sentences should be varied in length and type, but strive for clarity, simplicity and coherence. Use an 'active', not 'passive', voice whenever possible (e.g., passive: In terms of an unavoidable negative impact, this project will cause the loss of aquatic macrophyte habitat that is used by juvenile fishes. vs. active: Loss of aquatic macrophyte habitat used by juvenile fishes is an unavoidable negative impact of this project.).

Mechanics: Your writing must be correct grammatically. Verb tenses must be appropriate and in agreement within sentences and throughout the text. Sentences must be complete (noun, verb, etc.). Spelling, capitalization, punctuation, etc. must be correct. All written work must be done on a word processor. Standard software used on campus has spelling, grammar and word selection checkers. A combination of these electronic aids, the ease of revisions on word processors, and peer reviews of your writing means there is no excuse for you to give me sloppy written products with mechanically poor writing or typos.

Grading Your Writing
Feedback: I will not mark everything that is "wrong" with your writing, and I will not be completely negative. I will try to point out strengths and weaknesses in your writing and to suggest remedial actions. Generally, I will comment in the margins and provide a brief summary of key issues at the end of your paper. Although I expect grammatically polished work from students, I am often disappointed. I may extensively edit one paragraph in your work and indicate that you must do the same with the rest of the piece. Remember that it is your responsibility to complete the paper properly and to write effectively. I will not read poor quality work repeatedly in hopes of finding some redeeming value.

Standards: My writing standards for you are based on realistic expectations for upper division/graduate students and literate professionals who will do much writing on the job. An average or 'C' paper is one that adequately and completely addresses the assignment. There are no major errors in Content, Organization and Language/Style, but there might be questionable or unclear aspects or several Mechanical errors. None of the criteria are filled in an exceptional way. An 'A' paper is substantial, accurate and lucidly written. Points are fully developed and

discussed, and there are almost no mechanical errors. It excels in several criteria and is deficient in none. As deficiencies mount, your grade will decrease. An 'E' paper is seriously deficient in at least two major criteria. In general, this level of work is unclear, vague, illogical, difficult to follow, lacks supporting information and is frustrating to read. 'B' or 'D' work falls between these categories.

Peer Review/Grading Form

I will use criteria similar to those below to evaluate your team's EIS and your individual contributions to the EIS. Blank copies of the form will be given to you later in the course.

Reviewing Team Names:
Your Team Names:
Title of EIS:

CONTENT EVALUATION (50%): Do the writers clearly define central terms and concepts? Are important points illustrated by examples, research findings, etc. Have all aspects of the question been addressed adequately and logically? Are the CEQ categories fully addressed? What impacts, alternatives, conditions, ideas, etc. have been left out? What examples, ideas, or information would clarify or reinforce the conclusions reached in the EIS?

ORGANIZATION, STYLE and LANGUAGE (25%): Is the EIS clearly organized around the CEQ categories and information developed by the class? How logical and effective are the paragraphs? Are there effective transitions between paragraphs? Are the introduction and conclusion effective? Are terms used clearly? Is word choice appropriate? Are sentences logical and clear? Is writing style appropriately objective?

MECHANICS (25%): Are verb tenses appropriate? Which sentences have grammatical errors? Which words are spelled incorrectly? Is punctuation, capitalization, etc. correct?

GENERAL COMMENTS: What are the overall strengths and weaknesses of the EIS? What revisions should be made to improve the EIS and make it ready for final grading?

References

You will cite information sources in your writing, so it is important for you to cite references correctly in the **Literature** **Cited** section at the end of your EIS. This means **you will include only references that are actually cited in the EIS**. In general you should paraphrase information; keep quotes to absolute minimum in the text of your EIS. If you do quote someone directly, put the refrain in quotation marks and cite it, e.g., "...smallmouth bass reproduction was impaired by marina operations, especially gasoline spills and motor exhaust" (Smith 1988, Green 1985). When paraphasing a source, cite this way: Previous researchers (Brown and Jones 1985, cited in Smith 1988) concluded that the habitat loss estimates of Barkly et al. (1982) were incorrect. Note carefully how these citations are punctuated, and how many authors are listed, when used in various text situations (compare to citations below).

Use only the following formats for citing references in your **Literature Cited** section. Note the exact way each type of citation is written in the **Literature Cited** relative to the number of

authors, order and type of entries, underlining, abbreviation, capitalization, punctuation, etc. All references (do not separate books, articles and reports) should be listed in alphabetical order by first author's last name and without numbers. Always undeline or italicize genus/species names (e.g., <u>Acipenser</u> <u>transmontanus</u> or *Acipenser transmontanus*).

Article (example citation)
Barkly, L.P., J.A. Gardner and S.W. Hope. 1982. Effects of marina development on smallmouth bass in streams. Trans. Amer. Fish. Soc. 116 (2): 191-205.

Book (example citation)
Brown, E.A., and P.S. Jones. 1985. <u>The</u> <u>Ecology</u> <u>of</u> <u>Black</u> <u>Basses</u> (<u>Genus</u> *<u>Micropterus</u>*). John Wiley and Daughters. New York, London and Tokyo.

Book Chapter (example citation)
Green, M.N. 1985. Reproductive behavior and habitats of smallmouth bass. In: Pages 141-167, E.A. Brown and P.S. Jones (Eds.), The Ecology of Black Basses (Genus <u>Micropterus</u>), John Wiley and Daughters. New York, London and Tokyo.

Government Document (example citation)
Smith, S.L. 1988. Feeding habitats of smallmouth bass (<u>Micropterus</u> <u>dolomieui</u>). U.S. Fish and Wildlife Service Report Series No. 58. Kansas City, MO. USFWS 88/03515-12.

Internet (example citation)
Tremont, J.P. 1998. Effects of marina development on Great Lakes wetlands. http://www. michdnr/wetlands/marinas.html (many times there is no author; use keywords in title for citations in text of EIS; e.g., Marina Development 1998)

Assignments

Environmental Impact Assessment: Midway through the course, each team will prepare an EIA. This document will serve as a initial overview of the final EIS. You will cover the eight CEQ categories and reach a conclusion on whether the project is likely to have a significant environmental impact. You will then make, and briefly defend (based on the EIA), a positive or negative declaration.

SPECIAL TEAM PROJECT: Each team will pick <u>one</u> of the topics below and do research on it during the course. The results will be presented to the class late in the term and summarized in a 5-8 page document copied for each of the other teams. Along with biological data collected in the field by previous classes, this information will be used by all teams to prepare their EIS's.
    <u>Neighborhood Survey</u>: One team will conduct a car/boat traffic survey at various times of day to assess current use of the project area and to extrapolate further use created by the proposed project. This team will also prepare and conduct a survey of residents and businesses along lower Sandy Creek to assess attitudes about the impacts of previous and new boat launch/ marina projects in the area. This project will be mostly field work, and will include dawn, dusk and weekend times.

Coastal Development Impacts: One team will review literature provided by me and conduct research in Drake Library to provide a summary of likely positive and negative impacts of and mitigations for project-related construction activities: dredging, revetments, docks, boat traffic, etc. This project will be mostly indoor work involving reading, notetaking and writing, and may include evening or weekend library work..

Local, State and Federal Laws/Regulations: One team will review literature provided by me, conduct research in Drake Library, and make contacts with local agencies to provide a discussion of laws and regulations applicable to development projects in wetlands and navigable waters. This project will be mostly indoor work involving literature review and some phone calls to agencies. It may include out of class days or visits to agency offices.

Project Alternatives: One team will examine alternative sites for the project and provide an estimate of the cumulative demand for boat launching and marina services in the Rochester region of Lake Ontario. This team will provide an overview of the likely major impacts of each alternative and the null alternative. This project will require travel to local sites, brainstorming, and phone calls to local officials and fishermen, and may include days out of class.

Environmental Impact Statement: Each team will prepare an EIS in NEPA format by following CEQ and my guidelines. Within each team, workloads will be decided and assigned equitably in terms of quantity and quality of effort required by each individual team member. EIS sections prepared by each individual will be separately identifiable, but the whole EIS will be in a common format and type style. **Most important**: the individually prepared sections must clearly be part of an integrated whole environmental analysis of the project.

Writing Slant: Each EIS team will choose a "slant" for their EIS. Within the bounds of the data accumulated by the class, one team will write their EIS as though they are the *Developer and His/Her Consultants*. The other three teams will write from the following points of view: 1) *Independent Scientists* evaluating the data "completely objectively", 2) *Regulatory Agency Personnel* evaluating the data from the perspective of laws, regulations and permit criteria, and 3) an *Environmental Activist Group* opposed to the project.

Permit Hearing: On the last afternoon of class, a Permit Hearing will be held to determined whether or not the project can be allowed to proceed. Each student will have an individual role in the hearing that will include: (1) Preparing for the role re: a realistic position backed by EIS (refer to specific laws, regulations, scientific data); (2) Introducing yourself (who you represent = your role) and stating your position for or against the project, and (3) Helping your team (slant) prepare testimony
for the hearing.
Each team will organize a 10-15 min presentation (2-4 min per team member) stating reasons why you believe, according to your team's slant/individual role, the project should or should not be approved. Your team's position should be founded in the data collected in this course, reference data, and the relevant laws and regulations. The key is a logical, supported argument for or against the project consistent with your team's slant and all information available.

DUE DATES:

24 May Team EIAs due in class; include summary coverage of the eight CEQ
           categories as brainstormed by the team; does not require data; this is a
           best guesstimate of what the likely impacts of the proposed project will
           be; will serve as an outline for the EIS
28 May Team special project reports to class and summaries distributed
31 May Team EISs due by the end of the day
           There will be a 5% per day penalty for late submissions.

Study Questions

The following questions are designed to test your knowledge of the content covered in
Environmental Impact Analysis. If you can answer these questions based on lecture and reading
materials, you should have little trouble mastering quizzes. Questions are indicated for each
week of class.

Week 1
1. What are the key provisions of SEQR? How is this law administered by NYSDEC? What
process does DEC go through before issuing a project permit?

2. Define/explain NEPA, EIA (or EA), EIS, CEQ, Executive Order 11514 (as amended by EO
11991), FONSI, impact, positive and negative declarations, mitigation, scoping, lead agency,
categorical exclusion, environmental information document.

3. What is the legal and historical basis for environmental impact analysis and NEPA? What are
the key provisions of the law? What are the benefits and deficiencies of NEPA? What kinds of
federal projects can be eliminated from NEPA by Pre-EIS screening?

4. Describe/explain the 11 steps or tasks required to prepare an EIS? How do EIAs and EISs
differ? What are the eight categories of information required by CEQ in an EIS? Why is each
important? What kinds of information typically are included in each category?

Week 2
1. Define environmental attribute. List typical environmental attributes considered in an EIS.
What kinds of things do we need to know to fully assess the environmental impacts of a change
in an attribute? Why are projections over time and consideration of cumulative impacts
important? What are some typical screening criteria used to estimate the magnitude of impacts?

2. Why is citizen participation in the EIS process crucial? What strategies and techniques
should agencies and preparer's of EISs use to involve the public? What steps must citizens take
to: a) ensure that they find out about projects in a timely fashion?; b) determine whether a project
falls under NEPA or a SEPA; c) influence how an EIS will be prepared and what will be
addressed; d) object to a Negative Declaration; e) review a draft and a final EIS; and f) object to
a final EIS?

Summary

This Course Guide was prepared to help you enjoy and succeed in this and future courses. I hope you will use the Guide extensively, and that you will note how it can be improved for the future. Please feel free to share with me your suggestions for improvement, verbally or in writing. For you, I wish good studying and success in Environmental Impact Analysis.

Lecture Outlines

The following pages are copies of the overhead transparencies I will use during lectures. They are intended to provide an outline for you as I speak, along with definitions, figures and key concepts. By relieving you of much writing, these pages should make it easier for you to concentrate on what I am saying, to ask questions, and to discuss what is presented in class.

Sandy Harbor Marina

A Development Proposal to Enhance Recreational Boating on Lake Ontario

Presented by

James M. "Wild Build" Haynes
Lakeside Develop-It-All Corp.
Brockport, NY

May 2002

Background

In 1984-85, a public boat launching facility was built on the north side of the Lake Ontario State Parkway on Sandy Creek, Monroe County, New York. The facility consists of two launching ramps and parking spaces for about 50 vehicles and trailers adjacent to a 2 ha wetland that is part of an 8 ha complex of wetlands divided by the Lake Ontario State Parkway. The lead agency was the NYS Dept. of Transportation. That agency prepared an EIA under SEQRA and declared the project a Type II action with little environmental impact (NYSDOT 1984). In conjunction with the DOT analysis, two Brockport summer classes (1983, 1984) also conducted environmental analyses at the site. While their EISs are not available, raw data from their biological investigations can be obtained (Haynes, unpublished).

Project Description

Recently the Lakeside Develop-It-All Corp. purchased 4 ha of the upland, wetland and backwater of Sandy Creek adjacent to the state-owned public boat launch. The project will reduce the existing 4 ha of freshwater wetland to approximately 3 ha. We propose to build a full service marina on the property to accommodate sail and power boats. This will require dredging the backwater to a depth of 3 m (current depths are < 1 m), building 350 m of docks for 100 boat slips, and constructing a ship's store, repair shop, gas dock and restaurant. A small parking lot will be constructed on-site with daily overflow parking directed to the public parking areas adjacent to the facility. Proposed locations for these facilities are indicated on Map 1.

Winter storage of boats and trailers will be the responsibilty of individual boat owners. Analysis of sediments indicates that toxic chemical levels do not differ from background levels in Lake Ontario sediments, so approximately 10,000 cubic yards of dredge spoil will be dumped at the nearest permitted disposal site in the lake. Boats from the marina will use the existing channel in Sandy Creek to enter Lake Ontario, and some dredging of this channel may be required. For further details, refer to the Marina EAF form prepared by the   EIS teams employed by the developer.

The project is expected to cost $1.5 million and require two years to complete. Memberships and sales are expected to generate $175,000 per year. Annual expenses are expected to be $100,000.

Project Justification

Access to Lake Ontario is a critical impediment to expanded recreational opportunites: boating, sailing, fishing, water skiing, etc. The current public boat launch provides needed access for anglers, especially during fishing derbies, but does not address the needs of many boaters. Private marinas along Sandy Creek do not all provide full services for boaters and, until the recent economic downturn, were filled to capacity. This project will provide the first full service marina on Sandy Creek. Surveys in the 1990s of the marinas and local residents indicated most businesses and neighbors do not oppose a new marina facility. To mitigate potential boating safety and noise problems, the developer and owner will provide boating safety and courtesy information to renters of dock space. While the small wetland will be changed, the economic benefits to the Monroe County economy far outweigh the environmental costs. This project will pay property taxes and provide jobs for 4-6 people. For these reasons, local and state authorities should grant variances to their laws and regulations so that residents of the region can enjoy the scenic beauty of lower Sandy Creek and the economic benefits that will accrue from this project.

Logistics

The developer has his own construction firm to build the marina. He will contract with a commercial dredging firm to deepen the channel. He has hired environmental scientists from SUNY Brockport to prepare the required environmental impact statement. All questions concerning the project should be directed to the developer.