CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION

SECTION 206 AQUATIC ECOSYSTEM RESTORATION PROJECT
NORTH PARK LAKE
ALLEGHENY COUNTY, PENNSYLVANIA

1. Review of Compliance (230.10(a)-(d)).

A review of the proposed action indicates that:

a. The discharge represents the least environmentally damaging practicable alternative and if in a special aquatic site, the activity associated with the discharge must have direct access or proximity to, or be located in the aquatic ecosystem to fulfill its basic purpose (if no, see Section 2 and information gathered for EPA alternative); YES_X_ NO__

b. The activity does not appear to: 1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of the CWA; 2) jeopardize the existence of Federally listed endangered or threatened species or their habitat; and 3) violate requirements of any Federally designated marine sanctuary (if no, see Section 2b and check responses from resource and water quality certifying agencies); YES_X_ NO__

c. The activity will not cause or contribute to significant degradation of waters of the U.S. including adverse effects on human health, life stages of organisms dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values (if no, see Section 2); YES_X_ NO__

d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem (if no, see Section 5). YES_X_ NO__

2. Technical Evaluation Factors (Subparts C-F).

	N/A	Not Significant	Significant
a. Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C).			
1. Substrate impacts.	__	X	__
2. Suspended particulates/ turbidity impacts.	__	X	__
3. Water column impacts.	__	X	__
4. Alteration of current patterns and water circulation.	__	X	__
5. Alteration of normal water fluctuations/hydroperiod.	__	X	__
6. Alteration of salinity gradients.	X	__	__
b. Biological Characteristics of the Aquatic Ecosystem (Subpart D).			
1. Effect on threatened/endangered species and their habitat.	X	__	__
2. Effect on the aquatic food web.	__	X	__
3. Effect on other wildlife (birds mammals, reptiles, and amphibians).	__	X	__
c. Special Aquatic Sites (Subpart E).			
1. Sanctuaries and refuges.	X	__	__
2. Wetlands.	__	X	__
3. Mudflats.	__	X	__
4. Vegetated shallows.	__	X	__
5. Coral reefs.	X	__	__
6. Riffle and pool complexes.	__	X	__
d. Human use characteristics (Subpart F).			
1. Effects on municipal and private water supplies.	__	X	__
2. Recreational and commercial fisheries impacts.	__	X	__
3. Effects on water related recreation.	__	X	__
4. Aesthetic impacts.	__	X	__
5. Effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.	__	X	__

Remarks: Where a check is placed under the significant category, preparer add explanation below.

3. Evaluation of Dredged or Fill Material (Subpart G).

a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (Check only those appropriate.)

1.	Physical characteristics.	X
2.	Hydrography in relation to known or anticipated sources of contaminants.	
3.	Results from previous testing of the material in the vicinity of the project.	
4.	Known, significant, sources of persistent pesticides from land runoff or percolation.	
5.	Spill records for petroleum products or designated (Section 311 of CWA) hazardous substances.	
6.	Other public records of significant intro-duction of contaminants from industries, municipalities or other sources.	
7.	Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities.	
8.	Other sources (specify).	

List appropriate references: All stone for aquatic habitat creation and will be obtained from a clean upland source. All wood used to construct porcupine cribs will be appropriate for freshwater lakes and will not leach toxic materials. Lake bottom sediment that may be temporarily moved and stored on the lake bottom prior to its final removal is rated as clean fill that does not contain any toxic materials that would negatively impact downstream water quality.

b. An evaluation of the appropriate information in 3a above indicates there is reason to believe the proposed dredge or fill material is not a carrier of contaminants, or that levels of contaminants are substantively similar at extraction and disposal sites and not likely to require constraints. The material meets the testing exclusion criteria.

Yes X No__

4. Disposal Site Delineation (230.11(f)).

a. The following factors, as appropriate, have been considered in evaluating the disposal site.

1.	Depth of water at disposal site.	
2.	Current velocity, direction, and variability at disposal site.	
3.	Degree of turbulence.	
4.	Water column stratification.	
5.	Discharge vessel speed and direction.	
6.	Rate of discharge.	
7.	Dredged material characteristics	

(constituents, amount, and type of material, settling velocities). X

8. Number of discharges per unit of time. __

9. Other factors affecting rates and patterns of mixing (specify). ___

List appropriate references: The only material to be deposited in the lake would be clean stone and porcupine cribs constructed of non-treated lumber to create structure for fish an benthos. Lake bottom sediments temporarily re-deposited below the elevation of ordinary high water during mechanical dredging will not cause any significant aquatic impacts given that the work will be done in a drained lake.

b. An evaluation of the appropriate factors in 4.a. above indicates that the disposal site and/or size of mixing zone are acceptable.

Yes X No__

5. Actions to Minimize Adverse Effects (Subpart H).

All appropriate and practicable steps have been taken through application of Sections 230.70-230.77 to ensure minimal adverse effects of the proposed discharge. Yes X No__

List actions taken: The stone and lumber to create fish habitat would be clean and would not contain toxic substances that could leach into North Park Lake. An erosion and sedimentation control plan will be developed and reviewed by the State. All practicable methods will be employed during dredging to minimize downstream turbidity increases during dredging.

6. Factual Determination (230.11).

A review of appropriate information as identified in items 2-5 above indicates that there is minimal potential for short or long term environmental effects of the proposed discharge as related to:

a. Physical substrate at the disposal site (review sections 2a, 3, 4, and 5 above). Yes X No__

b. Water circulation, fluctuation and salinity (review sections 2a, 3, 4, and 5 above). Yes X No__

c. Suspended particulates/turbidity (review sections 2a, 3, 4, and 5 above). Yes X No__

d. Contaminant availability (review sections 2a, 3, and 4 above). Yes X No__

e. Aquatic ecosystem structure and function (review sections 2b and c, 3, and 5 above). Yes X No__

f. Disposal site (review sections 2, 4, and 5 above). Yes X No__

g. Cumulative impact on the aquatic ecosystem. Yes X No__

h. Secondary impacts on the aquatic ecosystem. Yes X No__

7. Evaluation Responsibility.

a. This evaluation was prepared by:

_____ _____
Larry R. Moskovitz Date
Biologist

b. This evaluation was reviewed by:

_____ _____
Curtis N. Meeder Date
Chief, Planning and Environmental Branch

8. Findings.

a. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines. X

b. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines with the inclusion of the following conditions: __

c. The proposed disposal site for discharge of dredged or fill material does not comply with the Section 404(b)(1) guidelines for the following reason(s):

1. There is a less damaging practicable alternative. __

2. The proposed discharge will result in significant degradation of the aquatic ecosystem. __

3. The proposed discharge does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem. __

_____ _____
Date Stephen L. Hill
Colonel, Corps of Engineers
District Engineer