



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

AUG 22 1994

Dr. John H. Zirschky
Acting Assistant Secretary (Civil Works)
Department of the Army
Washington, D.C. 20310

Dear Dr. Zirschky:

In accordance with provisions of the December 21, 1992, Clean Water Act Section 404(q) Memorandum of Agreement (MOA) between the Department of the Interior (Department) and the Department of the Army (Army), I am requesting your review of the Pittsburgh District (District) Engineer's decision to issue a Section 404 permit for the project described in Public Notice 92-67, Permit Application No. 92073.

The permit would authorize the applicant, Mr. George B. Zambias, to discharge fill material into 12.7 acres of palustrine emergent, scrub-shrub, forested, and shallow open water wetlands to expand an existing retail shopping center in Crawford County, Pennsylvania. The proposed permit would provide, in part, after-the-fact permit approval for the unauthorized placement of fill material in wetlands as described in the District's January 28, 1987, Cease and Desist Order to the applicant. After review of the District's July 15, 1994, notification to the Fish and Wildlife Service (Service) and analysis of project site values and impacts (enclosed), I have determined that this case warrants elevation in accordance with criteria found in Part IV of the 1992 MOA (Elevation of Individual Permit Decisions).

The project site is situated in the headwaters of the French Creek watershed, which has been designated a focus area for fish and wildlife habitat restoration activities by the Service's Ohio River Ecosystem Management Team. In addition, Central Crawford County has been designated a focus area for wetland protection and restoration as part of the Lower Great Lakes-St. Lawrence Joint Venture Segment of the North American Waterfowl Management Plan. Headwater wetlands in the watershed help maintain the excellent water quality in French Creek, which supports 66 species of fish--more than any other stream in Pennsylvania. French Creek also provides habitat for 25 species of freshwater mussels, including 2 species that are federally listed as endangered.

Issuance of a Federal permit for the Meadville Mall expansion project will have a substantial and unacceptable adverse impact on the diverse wetland complex at the project site, which I have determined to be an aquatic resource of national importance. The palustrine wetlands on the site form a mosaic of aquatic beds, emergent, deciduous forested, mixed deciduous forested-shrub, deciduous scrub-shrub, mixed deciduous shrub-emergent, and open water habitat types. Botanical surveys of the wetland complex have

revealed the presence of over 193 species of plants including one uncommon species, Juncus articulatus, found in only 27 sites in Pennsylvania.

The diversity of plant species and wetland types provides excellent habitat for a variety of wildlife species. Fifty-two bird species have been documented using the wetlands, including 11 confirmed breeders and 34 probable breeders. Many of these species are migratory trust species of interest to the Department which depend upon wetlands and forested habitat for resting, feeding, and nesting. The Meadville Mall wetlands are within the migratory corridor for 12 waterfowl species and are regularly used by resident and migrating birds. Emergent wetland areas on site are frequently flooded for extended periods of time and provide habitat for waterfowl to rest and feed. Service biologists have observed mallards and wood ducks utilizing these areas during several site visits. In addition, two State-designated threatened species, the American bittern and least bittern, historically occurred in the area and may be occasional visitors to the wetland. Service biologists have observed numerous other species of reptiles, amphibians, and mammals during numerous site visits. Forage fishes of importance as a food source for wetland-dependent birds were also observed in the shallow open water of the site.

Expansion of the mall, as proposed, would eliminate 12.7 acres of wetlands, and would reduce habitat and plant species diversity of the remaining on-site wetlands. In addition, 35-40 acres of on-site and off-site wetlands would be adversely affected by changes in hydrology and increases in polluted runoff from the expanded mall.

The mosaic of wetland types at the mall site, and the diversity of plant and animal species supported by this wetland complex, would be difficult, if not impossible, to replace. Therefore, I have concluded that compensatory mitigation in this case will have an unacceptably high risk of not replacing in-kind wetlands losses. The lack of a specific mitigation plan exacerbates this already high risk. Finally, I find that proposed mitigation would not reduce impacts below the "substantial and unacceptable" threshold.

Because the mall expansion would destroy very high value wetlands, and because compensatory mitigation would have an unacceptably high risk of not replacing in-kind wetland functions and values, I do not believe this project should be authorized as currently proposed. However, I believe there is a less damaging, practicable alternative to mall expansion that would avoid impacts to aquatic resources of national importance. The Department would not be opposed to expansion of the mall in a configuration that would extend the mall from the west end of the existing structure. This alternative could accommodate a modest expansion of the mall and would require filling approximately 2 acres of lower value wetlands on the site that are isolated as a result of previous development. The 2 acres of wetlands lost under this alternative could be compensated on-site by removal of excess fill placed in wetlands during construction of the existing mall, and the conversion to wetland of a small portion of deciduous forest along the east side of the existing wetlands.

In summary, I believe higher level review of the proposed permit decision is warranted in this case because the project would have substantial and unacceptable impacts on high value wetlands for which the successful replacement of in-kind functions and values is improbable. I am also concerned about the Corps of Engineers continued willingness to issue permits without a detailed compensatory mitigation plan. While I support the District's requirement for a substantial performance bond, I believe such bonds should be required in conjunction with specific, detailed mitigation plans, not as a substitute for such plans at the time of permit issuance.

In conclusion, I request that you take the following actions:

1. Instruct the District to reevaluate the practicability of the alternative for mall expansion previously suggested by the Service, and as described herein.
2. Instruct the District that should they determine that the alternative recommended by the Service is practicable, the District should revise the draft permit as necessary to authorize only such fill as needed to implement the alternative, and require the applicant to develop a mitigation plan in consultation with the Service, for approval by the District.
3. Instruct the District that should they determine that the alternative recommended by the Service is not practicable, the District should deny the permit for the proposed project.

If your decision in this matter is contrary to these recommendations, I believe a specific mitigation plan should be prepared in consultation with the Service, and approved by the District, before a permit is issued.

Additional information is enclosed to support the Department's concerns and recommendations relating to the proposed permit decision. I request your review of the decision by the District Engineer to proceed with permit issuance for the Meadville Mall expansion project.

Sincerely,

/s/ George T. Frampton Jr.

George T. Frampton, Jr.
Assistant Secretary for Fish
and Wildlife and Parks

Enclosure

**ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS
EVALUATION AND REQUEST FOR REVIEW**

MEADVILLE MALL EXPANSION

PROJECT DESCRIPTION

The applicant, George B. Zambas, proposes to expand the existing Meadville Mall located southeast of the intersection of Routes 19 and 6/322, 2 miles west of Meadville, Vernon Township, Crawford County, in northwestern Pennsylvania. The existing mall covers approximately 19.5 acres of the 63.2 acres owned by the applicant. The expanded mall would cover an additional 19.9 acres and increase the total building area from 261,357 square feet to 480,202 square feet. The project includes the addition of two new anchor stores, expansion of two existing anchor stores, and space for additional small shops. The total project will require the placement of approximately 40,000 cubic yards of fill in 12.7 acres of wetlands. These wetlands are part of an approximately 50-acre wetland extending south and east (downstream) from the proposed project site.

Project-related Activities

In 1986, the applicant began clearing, grubbing, draining, grading, and filling wetlands adjacent to the existing mall without Federal or State authorization. On January 28, 1987, the Pittsburgh District Corps of Engineers (District) issued a Cease and Desist Order notifying Mr. Zambas that these unauthorized activities were a violation of the Clean Water Act. Mr. Zambas was advised to halt further activity and apply for an after-the-fact permit. After reviewing a copy of the Cease and Desist Order and conducting a site visit, the Fish and Wildlife Service (Service) recommended that the fill be removed and that the area be restored to its original condition in a letter dated February 23, 1987.

On March 4, 1987, the District issued a public notice for the placement of fill in 13.0 acres of wetlands for the non-water dependent purpose of expanding the existing Meadville Mall. In a letter dated March 30, 1987, the Service recommended that the applicant be required to conduct an alternatives analysis and that the permit for the proposed project be denied. The Service again recommended that the applicant be required to remove all material stockpiled in the wetlands, and that restoration of the site commence immediately to minimize adverse impacts.

On July 14, 1987, the applicant submitted an alternatives analysis for the project to the District. The Service commented that the alternatives analysis was incomplete and did not clearly demonstrate that no upland alternative existed for the proposed project. The Service also advised the District that the applicant had not considered several on-site design options to avoid and minimize wetland impacts, and again recommended permit denial and immediate restoration of the site.

On May 23, 1988, the Pennsylvania Department of Environmental Resources (DER) denied the State encroachment permit and water quality certification for the project. In response to that action, the District denied the permit without prejudice on August 4, 1988.

On August 2, 1991, the District issued a second public notice for the expansion of Meadville Mall which proposed filling 17.5 acres of wetlands. On August 19, 1991, the Service responded to this second public notice and again recommended denial of the after-the-fact permit and removal of the unauthorized fill.

On November 21, 1991, the DER denied a second State encroachment permit and Section 401 water quality certification for the project. On December 13, 1991, the District again denied the permit without prejudice. However, the applicant appealed DER's second denial of a State permit for the project to the Environmental Hearing Board. Through a Consent Order and Adjudication, dated December 2, 1992, the DER approved the permit for 18.4 acres of fill in wetlands with 42.5 acres of compensatory mitigation. The State permit, however, has been held in abeyance pending issuance of a Corps permit.

On September 16, 1992, the District issued a third public notice to fill 18.4 acres of wetlands for the Meadville Mall expansion project. Following several meetings with the resource and regulatory agencies and the applicant, the Service again recommended that the permit be denied and that the area be restored to pre-project conditions.

On January 3, 1994, the Service sent a follow-up letter to the District recommending once again that the permit, as proposed, be denied and that the site be fully restored to pre-project conditions. This letter also stated that the Service would not object to mall expansion into approximately 2 acres of less valuable wetlands isolated between the existing mall and Route 19.

AQUATIC RESOURCES OF NATIONAL IMPORTANCE

Regional Resources

Wetlands are a scarce resource in Pennsylvania, comprising only 1.4 percent of the total land area. Many of these wetlands are concentrated in the glaciated northeastern and northwestern corners of the State. However, even in northwestern Pennsylvania, wetlands comprise only 3.4 percent of the land surface (Tiner 1990). In addition, these glaciated wetlands have been subject to extensive loss from agriculture and other development. Between the 1780's and the 1980's, it is estimated that Pennsylvania's wetland base was reduced by 56 percent (Dahl 1990).

The wetlands in the project vicinity lie within the migratory corridor for twelve waterfowl species (Belrose 1976) and are regularly used by both resident and migrating species. These wetlands are part of the Service's North American Waterfowl Management Plan (Lower Great Lakes-St. Lawrence Basin Joint Venture) (NAWMP). The goal of the NAWMP is to protect and enhance waterfowl habitat. The Service, the Soil Conservation Service, the

Environmental Protection Agency and the Corps are identified as coordinating entities to assure enforcement of laws to protect wetlands in Joint Venture areas. Central Crawford County is one of four focus areas in Pennsylvania for this Joint Venture. Joint Venture focus areas are given the highest priority for wetland protection, restoration and creation.

Other migratory birds including woodcock, waxwings, sparrows, finches, warblers, swallows, and buntings have been observed using area wetlands for resting, feeding, and nesting. These birds depend upon wetlands and forests during their long annual migrations. In addition, research has shown that certain forest-dependent songbirds respond favorably to forested wetlands due to the greater abundance of insects and soil invertebrates in wetter habitats (Smith 1977, Petit et al. 1985).

The project site wetlands lie within the headwaters of the French Creek watershed and contribute to the excellent water quality of French Creek itself. Few streams in Pennsylvania exhibit the habitat quality found in French Creek, which supports a high diversity of life forms, including several that are rare. Many of these organisms have thrived in northwestern Pennsylvania since the glaciers of the last ice age disappeared 10,000 years ago. Biologists from Pennsylvania and several surrounding States have confirmed that much of the original flora and fauna native to French Creek still flourish in portions of the stream. In fact, 66 species of fish inhabit French Creek--more than any other stream in the State.

Examples of this natural diversity can also be found in the 25 freshwater mussel species which are dependent on high water quality stream environments. Due to degraded stream conditions and loss of habitat, seven of these mussel species have limited distributions in the State and three of these species are also imperiled throughout their entire ranges in North America. Two species, the northern riffleshell mussel, Epioblasma torulosa, and the clubshell mussel, Pleurobema clava, are federally listed endangered species.

Because of its outstanding biological values, the French Creek watershed has been designated a "focus area" by the Service's Ohio River Ecosystem Management Team. As a focus area, the watershed will receive high priority for wetland protection and restoration efforts.

Site-Specific Resources

The palustrine wetlands on the site form a mosaic of aquatic beds, emergent, deciduous forested, mixed deciduous forested-shrub, deciduous scrub-shrub, mixed deciduous shrub-emergent, and open water habitat types. Two botanical studies within the wetlands on the project site identified 193 species of plants (Schmid, 1989 and Hill, 1991). Several of these plants are relatively uncommon in Pennsylvania and occur primarily in the glaciated plateau wetlands of northwestern Pennsylvania. One uncommon species, jointed rush, Juncus articulatus, has only been found in 27 other locations in Pennsylvania. The juxtaposition of a variety of wetland

types, along with the high diversity of plant species, make this site a unique resource.

The project site was partially cleared and ditched in 1986 and 1987 without Federal or State permits. This disturbed area currently does not contribute significantly to the plant species diversity of the site, since only 13 species of plants found in it do not also occur in the adjacent undisturbed wetlands. It is unknown if the disturbance eliminated any plant species from the site. The unauthorized ditching added 0.3 acres of open water/submerged aquatic area to the mosaic of wetlands types found on the site.

The diversity of plant species and wetland communities provides excellent habitat for a variety of wildlife species. During three visits to the project site in 1991, a local naturalist documented 52 bird species utilizing the wetlands. Eleven of these species were confirmed breeders in the wetlands and all but seven are probable breeders at the site. A copy of the report is attached.

Site wetlands also provide significant habitat for waterfowl. In addition to the 0.3 acres of permanent open water, approximately 10 acres of cattail and sedge dominated wetlands in the southern section of the site are frequently flooded with up to 1 foot of water for extended periods of time. Openings created by muskrats and natural thinning of the cattails provides excellent habitat for waterfowl. Service biologists have observed mallards and wood ducks in this area during several field visits to the site.

Other water dependent birds, including Virginia rail and green-backed heron, also have been observed resting and feeding in the shallow water near the center of the wetlands. Two State-designated threatened species, the American bittern and least bittern, historically occurred in the area and may still use the wetlands.

White-tailed deer, muskrat, meadow vole, eastern cottontail rabbit, grey squirrel and eastern chipmunk were observed during field visits. Evidence of use by raccoon and fox was also noted. Reptiles and amphibians (including American bullfrog, red spotted newt, and spring peepers) abound in the wetlands. Tadpoles and minnows utilize the shallow open waters of the site.

The DER has rated the wetland as an "Important Wetland" as defined in Section 105.17 of their State law. "Important Wetlands" include areas that provide natural biological functions such as nesting, feeding, resting and rearing areas; provide water quality functions such as sedimentation abatement and removal of pollutants; serve as valuable flood storage areas; and provide prime natural recharge areas. The Pennsylvania DER's State permit Record of Decision recommended denial based upon the high functional values of these wetlands. Independent consultants have also recognized this wetland as a diverse and valuable resource (Schmid, 1989).

SUBSTANTIAL AND UNACCEPTABLE IMPACTS TO AQUATIC RESOURCES OF NATIONAL IMPORTANCE

The proposed permit would authorize the filling of 12.7 acres of palustrine emergent, scrub-shrub, scrub-shrub emergent, forested, forested scrub-shrub, and open water/submerged aquatic bed wetlands. Nearly all of the open water/submergent aquatic beds, over half of the scrub-shrub and scrub-shrub emergent wetlands, and a portion of the forested scrub-shrub wetlands would be destroyed by the proposed fill. Over three-fourths of the wetlands remaining within the project area after construction would be emergent marsh. The loss of habitat types from the wetland mosaic would cause a significant decline in habitat diversity and would result in a reduction of fish and wildlife species using the site.

The Department concurs with the District's conclusion in the Statement of Findings that remaining wetlands on the project site and contiguous wetlands on the adjacent property will have decreased functions and values as a result of the proposed mall expansion. The proposed project would significantly increase the area of parking lot and would therefore dramatically increase the amount of untreated runoff from the site. Sediment, oils, metals, and other pollutants would discharge directly into the remaining wetlands, degrading their quality and reducing plant diversity. Moreover, the increase in impervious surfaces, coupled with reduced area of receiving wetlands, would increase the depth and duration of ponding/saturation in the remaining wetlands. This would adversely affect an additional 35-40 acres of emergent and forested scrub-shrub wetlands that are contiguous to the proposed fill site. The Department considers this to be an indirect adverse impact of the proposed project.

Special conditions included in the draft permit would require the establishment of a minimum of 30 acres of mitigation wetlands, with no specific site or design plans, to offset the loss of wetlands at Meadville Mall. As no specific mitigation plan has been prepared, it is impossible to evaluate the possible merits of the required compensation. Irrespective of the lack of a plan, the Department concludes that the mosaic of wetland types at the Meadville Mall site, and the diversity of plant and animal species supported by this wetland complex, will be difficult, if not impossible, to replace through compensatory mitigation. Therefore, proposed mitigation would not reduce impacts below the "substantial and unacceptable" threshold.

The Department's conclusion that compensatory mitigation in this case will have an unacceptably high risk of not replacing in-kind wetlands losses is based on experience with past mitigation projects in Pennsylvania and elsewhere. In 1991 and 1993 the Service studied the success of 47 wetland mitigation sites associated with highway construction projects, other permits and illegal fill removal in Pennsylvania. All attempts to create scrub-shrub and forested wetland habitat types on the sites studied were complete failures, in spite of substantial investment of funds. Fish and Wildlife Service evaluations of attempts to create forested and scrub-shrub habitat types at wetland mitigation projects in other parts of the country have shown similar results.

The Department concludes that issuance of the permit for the project as proposed, would result in substantial and unacceptable adverse impacts to aquatic resources of national importance. The Department maintains that permit issuance would lead to degradation and loss of these aquatic resources and would be contrary to the requirements of Section 230.10(c) of the 404(b)(1) Guidelines (40 CFR Part 230).

ISSUES RELATED TO PERMIT ISSUANCE

AVAILABILITY OF LESS DAMAGING PROJECT ALTERNATIVES

The Department believes there is a less damaging, practicable alternative to the currently proposed mall expansion that would avoid impacts to aquatic resources of national importance. The Department would not be opposed to expansion of the mall in a configuration that would extend the mall from the west end of the existing structure. This alternative could accommodate a modest expansion and would require filling approximately 2 acres of lower value wetlands on the site that are isolated as a result of previous development. The 2 acres of wetlands lost under this alternative could be compensated on-site by removal of excess fill placed in wetlands during construction of the existing mall, and the conversion to wetland of a small portion of deciduous forest along the east side of the existing wetlands. The Service stated that such an alternative would be acceptable in a letter to the District on January 3, 1994.

RECOMMENDATIONS

The Department recommends the following actions:

1. The District should reevaluate the practicability of the alternative for mall expansion previously suggested by the Service, and as described herein.
2. Should the District determine that the alternative recommended by the Service is practicable, the District should revise the draft permit as necessary to authorize only such fill as needed to implement the alternative, and to require the applicant to develop a mitigation plan in consultation with the Service, for approval by the District.
3. Should the District determine that the alternative recommended by the Service is not practicable, the District should deny the permit for the proposed project.

If the decision in this matter is contrary to these recommendations, a specific mitigation plan should be prepared in consultation with the Service, and approved by the District, before a permit is issued.

Literature Cited

- Belrose, Frank C., 1976 Ducks, Geese and Swans of North America, Stackpole Books, Harrisburg, PA 543pp.
- Dahl, T.E. 1990. Wetlands Losses in the United States 1780's To 1980's. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 13pp.
- Hill, Robert J., 1991 Botany Report, Proposed Meadville Mall Encroachment DER File No. E20-374 17pp.
- McCoy, Richard W., 1991 An Evaluation of 30 Wetland Mitigation Sites Constructed by the Pennsylvania Department of Transportation Between 1983 and 1990 24pp.
- Petit, D.R., K.E. Petit, and T.C. Grubb, Jr. 1985. On atmospheric moisture as a factor influencing distribution of breeding birds in temperate deciduous forest. Wilson Bull. 97:88-96.
- Schmid, James A., 1989 Wetland Identification at the Meadville Mall Site 35pp.
- Smith, K.G. 1977. Distribution of summer birds along a forest moisture gradient in an Ozark watershed. Ecol. 58:810-819.
- Tiner, Ralph W. 1990. Pennsylvania's Wetlands: Current Status and Recent Trends. U.S. Fish and Wildlife Service, Newton Corner, MA. 104pp.

Report on Breeding Bird Study at Meadville Mall
Prepared by Ronald E. Harrell REH
428 Park Ave., Meadville, PA 16335
June 11, 1991

The following are the results of a study of the use by birds of the wetlands area and adjoining woodlands adjacent to Meadville Mall on its south side. The study was completed over three visits to the area. The dates and times of day are given below.

May 21, 1991, 7:30 - 9:30 a.m.

May 26, 1991, 5:30 - 9:00 a.m.

June 6, 1991, 6:00 - 9:00 p.m.

Bird species were identified. Also their behaviors were observed to determine which were breeding in the area. Guidelines used in compiling the Pennsylvania Breeding Bird Atlas were followed. This meant that the species found were placed in four categories: *users*, *possible breeders*, *probable breeders*, and *confirmed breeders*.

A *user* is a species that uses the area for feeding, resting, etc., but does not breed there because no suitable habitat or nest sites are available. A *possible breeder* is a species for which suitable habitat and nest sites exist, but which does not indicate by behavior that it is actually breeding. A *probable breeder* is a species found in suitable habitat and exhibits behavior (male singing on a territory, agitated pair of adults, etc.) typical of birds who are breeding, but for which there is no other evidence that demonstrates that breeding is actually taking place. A *confirmed breeder* is a species for which evidence exists that assures the observer that breeding is taking place. Such evidence might be an active nest, adult carrying food for young, newly fledged young, etc.

The following 52 species were found and categorized according to the above criteria.

User(7 species)

Wood Duck (not enough open water to breed in my opinion)

Mallard (not enough open water to breed in my opinion)

Chimney Swift

Tree Swallow

N. Rough-winged Swallow

Barn Swallow

Blackpoll Warbler (migrant, not a summer resident)

Possible Breeder(18 species)

Green-backed Heron (wetland species that is not always found)

Red-shouldered Hawk

Virginia Rail (wetland species that is not always found)

Killdeer

Mourning Dove
Hairy Woodpecker
Least Flycatcher
Eastern Phoebe
Blue Jay
American Crow
White-breasted Nuthatch
Solitary Vireo
American Redstart
Scarlet Tanager
Indigo Bunting
Rufous-sided Towhee
Brown-headed Cowbird
House Finch

Probable Breeder(16 species)

Black-billed Cuckoo (uncommon woodland species)
Northern Flicker
Eastern Wood Pewee
Willow Flycatcher
Great Crested Flycatcher
Black-capped Chickadee
Tufted Titmouse
House Wren
Veery
Wood Thrush
Gray Catbird
Red-eyed Vireo
Hooded Warbler
Common Yellowthroat
Rose-breasted Grosbeak
American Goldfinch

Confirmed Breeder(11 species)

Downy Woodpecker
American Robin
Cedar Waxwing
European Starling
Yellow Warbler
Northern Cardinal
Song Sparrow
Swamp Sparrow (expected wetland species)
Red-winged Blackbird (expected wetland species)
Common Grackle
Northern Oriole