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Report to the Honorable John D. Dingell, House of Representatives

November 1991

WETLANDS PRESERVATION

Easements Are Protecting Prairie Potholes but Some Improvements Are Possible





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Resources, Community, and Economic Development Division

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The Honorable John D. Dingell House of Representatives

Dear Mr. Dingell:

In response to your and the late Representative Silvio O. Conte's request, this report addresses the enforcement of protection easements under the Small Wetlands Acquisition Program (swap), administered by the Department of the Interior's Fish and Wildlife Service (Fws). The goals of this program are to preserve wetlands and increase waterfowl production. Wetlands protected under swap are located primarily in the Prairie Pothole Region of the United States, which encompasses parts of Montana, North Dakota, South Dakota, Iowa, and Minnesota. Prairie potholes are freshwater depressions and marshes, often less than 2 feet deep and 1 acre in size, that were created by glaciers thousands of years ago.

The loss of habitat is a major reason why populations of some duck species, such as mallards and pintails, have decreased about 60 percent in the last five decades. As many as half of the migratory waterfowl in the United States are raised in the Prairie Pothole Region. However, according to a 1988 report to the Congress by the Secretary of the Interior, only about 7 million of the original 20 million acres of prairie wetlands remain. Iowa, for example, has less than 1 percent of its original prairie wetlands.

In an effort to reverse the trend of converting prairie wetlands to agricultural and other uses and to increase waterfowl production, FWS has, in some cases, acquired all of the rights and interests associated with a wetland and its surrounding upland area, using what is called fee simple acquisition. In other cases, FWS has acquired a perpetual easement on a wetland from a landowner willing to enter into a contract that prevents the draining, filling, burning, or leveling of the area covered by the easement in exchange for a one-time lump-sum payment. Your request

¹The Prairie Pothole Region also includes portions of the Manitoba, Saskatchewan, and Alberta provinces in Canada. Offices for the four FWS wetland management districts we visited were located in Devils Lake and Kulm, North Dakota; Madison, South Dakota; and Fergus Falls, Minnesota. Together, these four districts contain about 25 percent of the total acreage protected by the SWAP easements.

²The Impact of Federal Programs on Wetlands, Volume I: The Lower Mississippi Alluvial Plain and Prairie Pothole Region (Oct. 1988).

reflects concern that wetlands are being destroyed because of noncompliance with the easement terms and the lack of proper administration by FWS.

Results in Brief

In the four Fws wetland management districts we visited, it appears that Fws is providing reasonable assurance that violators will be detected. The agency is doing so by (1) keeping accurate and current documentation on the wetlands to be protected, (2) keeping landowners and tenants on lands with wetlands easements informed of the terms of the easements, and (3) performing annual aerial surveillance of the wetlands under easement followed by on-the-ground inspection of suspected violations. Fws officials in two of these districts estimated that significantly less than 1 percent of the total acreage under easement is damaged each year. Officials at the two other Fws districts we visited were not able to provide us with such an estimate. Although some damaged wetlands may never again sustain the many varieties of life forms that existed before the damage occurred, almost all damaged wetlands are restored to be productive habitat for ducks, usually through voluntary compliance by the landowners or tenants.

swap has been successful in helping preserve prairie wetlands and could help increase waterfowl populations in the long term. This success, in large part, is due to effective efforts employed by Fws to enforce easements. As effective as these efforts have been, certain improvements could be achieved if Fws were to (1) better document the extent of waterfowl's use of wetlands under easement, providing important information in the event that litigation against a landowner or tenant becomes necessary, and (2) provide better guidance to district offices regarding the timely restoration of damaged wetlands and the circumstances under which notices should be issued and fines assessed to easement violators. Moreover, despite its success, swap alone cannot stem the decline in migratory waterfowl and wetlands. Drought, predation, farming practices, and illegal harvesting contribute to the continuing decrease in North America's duck population, and wetlands continue to be lost to agriculture, development, and other uses.

Background

SWAP is authorized by the Migratory Bird Hunting Stamp Act, as amended in 1958 (16 U.S.C. 718d(c)), and funded by the Migratory Bird Conservation Fund. In an effort to stem the loss of prime waterfowl production areas, FWS, through fiscal year 1989, had spent about \$49.4 million, or about \$40 an acre, to obtain over 23,000 easements on more than

1.2 million acres of wetlands in four of the five Prairie Pothole states (Iowa had no acreage under easement). Fws had also spent another \$102 million, or about \$181 an acre, to acquire fee simple title to almost 564,000 acres of wetlands.

In September 1989 the Director of FWs approved the acquisition of perpetual grassland easements with SWAP funds. These easements are intended to increase the effectiveness of SWAP by protecting the grasslands surrounding already protected prairie pothole wetlands from conversion to cropland or land with other agricultural uses. The intent is to provide more suitable nesting areas for waterfowl and make it more difficult for predators to locate the waterfowl's nests. As of September 18, 1991, FWS had spent over \$1.9 million, or about \$67 an acre, to acquire 28,880 acres of grassland easements.

SWAP's Organization

Overall direction for swap is provided by the Assistant Director for Refuges and Wildlife at Fws headquarters in Washington, D.C. Assistant Regional Directors for Refuges and Wildlife are located in each of Fws' seven regional offices. The Fws Region 3 office, located in Twin Cities, Minnesota, is responsible for swap easements in Minnesota, while the Region 6 office, in Denver, Colorado, is responsible for those in the Dakotas and Montana. Under Fws' decentralized management approach, however, the day-to-day administration, surveillance, and enforcement of swap easements in the two regions are vested in over 20 wetland management district offices. These offices are assisted by special agents from Fws' Division of Law Enforcement who are located in field offices throughout the two regions. These agents assist in preparing cases for litigation, provide technical assistance to the district offices, and participate in contacts with violators who refuse to voluntarily restore damaged wetlands.

SWAP Easement Enforcement Resources

FWS does not allocate funding and staff resources specifically for SWAP easement enforcement. Rather, enforcement duties are conducted as a part of other SWAP-related operations and maintenance activities. FWS regional officials estimated for us, however, that about \$500,000 is devoted annually to SWAP easement enforcement. Staffing devoted to SWAP easement enforcement at the four wetland management district offices we visited totaled 7.1 full-time-equivalent staff. The resources associated with the Division of Law Enforcement's assistance, not included in these estimates, is considered to be relatively small.

FWS Provides Reasonable Assurance That Violations Will Be Detected

FWS' enforcement of SWAP easements provides reasonable assurance that violations will be detected. FWS achieves this by documenting original conditions of prairie potholes under easement, conducting surveillance to determine if suspected violations are occurring, and confirming the violations through on-site visits.

Easement Documentation

Soon after a swap easement is negotiated, Fws begins to gather documentation considered especially important in the event that litigation against the landowner or tenant becomes necessary. A file is established that includes the contract and photographs and maps detailing the wetlands to be protected. The file is updated as needed to reflect the results of surveillance and inspections, contacts with the landowner/tenant, and changes in ownership.

Officials from both FWS Regions 3 and 6 annually notify new landowners and tenants of the terms of the easements on their properties. Region 3 also sends annual reminders regarding easement terms and its planned surveillance to all existing easement holders, while Region 6, with many more easements, annually publicizes in the local media its surveillance activities and the general terms of the SWAP easements.

Surveillance and Confirmation of Violations

Documentation is followed by annual aerial surveillance of the 1.2 million acres of wetlands under easement. Procedures have been developed prescribing the timing of flights and the altitude and speed at which they are flown. Follow-up flights at a lower altitude are often made to confirm suspected violations, and photographs are taken when needed. Fws officials, representatives of state conservation agencies, and private organizations interested in protecting wetlands agreed that these aerial surveys are the single most effective method of detecting suspected violations and that relatively few violations escape detection. Suspected violations may also be identified by Fws staff during their extensive travels throughout their districts or through tips from third parties, such as neighbors and other government agencies. Suspected violations are then confirmed by on-the-ground inspections during which additional photographs are taken and additional documentation is gathered.

Damaged Wetlands Are Almost Always Restored

At two of the four districts we visited, FWS officials estimated that significantly less than 1 percent of the total wetland acreage under easement in their districts is damaged each year. It also appears that although some damaged wetlands may never be completely restored to their prior condition, almost all are restored to be productive habitat for ducks, usually through voluntary compliance by the landowners or tenants. The time restoration takes varies according to the nature and extent of the violation.

Types of Violations Recorded

During the 3 years from 1986 through 1988, a total of 285 violation cases were processed in the four wetland management districts we visited. Some of these cases involved more than 1 violation of the terms of an easement; individual violations totaled 323. Of the 285 cases, 32 cases remained open as of December 31, 1989, and were carried into 1990. Two-thirds of the recorded violations involved drainage that carried water away from the wetlands. Filling wetlands with rocks, trees, junk cars, manure, and other materials accounted for another 25 percent. Burning the vegetative cover around wetlands, deepening wetlands to lower the water level around their outer edges (leveling), and other recorded violations comprised the remaining 8 percent. Some of the specific violations recorded on easements we reviewed are shown and discussed in appendix I.

Some violations, however, were not recorded. Before 1989, for example, FWS Region 6—which has the most easement contracts—often did not record the burning of vegetative cover around prairie pothole wetlands under easement. Burning is a common farming practice and can be beneficial for waterfowl by controlling undesirable vegetative cover. However, to benefit waterfowl, the burning can only be done occasionally. The annual burning of pothole areas, which was practiced in FWS Region 6 without being cited as a violation, is harmful, according to FWS regional officials. These officials told us, however, that they did not record burning as a violation because they had been concentrating on what they considered to be more serious violations involving draining and filling wetlands.

In the fall of 1988 alone, one Region 6 district counted 424 instances of burning but did not record them as violations. These instances totaled more than all of the other violations for all four districts in 1986 through 1988. This practice in Region 6 of not recording burning as a violation changed in the spring of 1989 when the region began recording

the violation and requiring landowners and tenants with wetland easements to obtain a permit from FWS before burning.

Estimates of Wetlands Damaged

Although comprehensive information is not available Fws-wide, officials at two of the four Fws districts we visited estimated on the basis of available information that far less than 1 percent of the acreage under wetland easements in their districts is damaged yearly. Moreover, although Fws officials believe that some damaged wetlands may never sustain the many varieties of life forms that existed before, almost all damaged wetlands are restored to be productive habitats for ducks by the landowner or tenant. In the 253 cases that were closed in 1986 through 1989 at the four Fws districts, wetlands were restored voluntarily in 243—or 96 percent. Restoration was accomplished in another five cases after the violators were threatened with litigation, while the remaining five cases were litigated and restoration orders issued.

SWAP's Effectiveness Could Be Improved

swap's success in preserving prairie pothole wetlands is due in large measure to effective efforts employed by Fws to enforce easements. As effective as these efforts have been, we noted certain weaknesses in the manner in which Fws district offices were documenting the extent of waterfowl's use of wetlands under easement, were ensuring the timely restoration of damaged wetlands, and were issuing notices and assessing fines to easement violators.

Waterfowl's Use of Wetlands Routinely Not Documented

rws' guidance on wetland easement enforcement identifies certain documentation considered especially important in the event that litigation against the landowner or tenant becomes necessary. One item is the extent to which waterfowl are using the wetlands under easement. Our sample of violation cases closed in 1986 through 1989 at the four rws districts we visited showed that rws did not routinely document the extent of waterfowl's use. An rws Region 3 official told us that this information is considered important and that adherence to this documentation requirement should be strengthened. rws headquarters officials told us that getting field staff to fully document certain conditions pertinent to wetlands easements has been a long-standing problem.

Some Restoration Could Be More Timely

Restoration of some damaged wetlands could be more timely. Delays occurred when FWS staff did not promptly perform on-the-ground inspections of suspected violations and/or contact the responsible land-owners or tenants once the violations were confirmed. Twenty-three, or about 9 percent, of the 253 closed violation cases we reviewed took over 2 years to close. For 10 of the 23 cases, 5 to 12 months elapsed between the time when a suspected violation was first discovered through aerial surveillance or other means and the time when the violators were contacted. In 81 cases, or about a third of the time, over 2 months elapsed between on-the-ground confirmation that a violation had occurred and contact with the violator to establish a date for the completion of restoration.

Delays also occurred after restoration completion dates had been established. Both regions' guidance provides that extensions may be granted when extenuating circumstances, such as bad weather, high water levels, or illness, hinder compliance. However, repeated extensions of restoration completion dates, sometimes extending over several years, are excessive and can hinder future enforcement by making U.S. Attorneys' offices and Interior's Office of the Solicitor less willing to prosecute or sue violators who refuse to voluntarily comply.³ Our sample included a case in which a violator was granted repeated extensions totaling almost 2 years because of "wet conditions." In another instance, a violator was granted a 16-month extension when he asserted that his hired help had, without an order to do so, redug a ditch that was draining the wetland. (See fig. I.3 in app. I.)

Moreover, FWS does not routinely follow up to ensure that restoration is completed by the established date. For example, in the above two cases, 2 and 9 months, respectively, expired between the last established completion date and FWS' confirmation that the restoration was satisfactory. The time between the established completion date and confirmation of the restoration ranged from less than 2 weeks to more than 6 months for other cases in our sample.

Fines Are Rarely Assessed

Wetland easement enforcement includes possible recourse to criminal and civil court proceedings. Violations of the provisions of the National Wildlife Refuge Administration Act of 1966, as amended, 16 U.S.C. 668dd–668ee, or regulations issued thereunder may result in

³Interior's Office of the Solicitor handles civil litigation relating to easement violations, while U.S. Attorneys' offices handle criminal actions.

imprisonment for not more than 1 year, a fine, or both. Violations of the terms of the easement agreement may also result in a civil action seeking enforcement of the easement provisions, damages, or both.

However, Fws regions historically have emphasized voluntary compliance by landowners or tenants to restore damaged wetlands under easement, even when the landowner or tenant is a repeat violator. Further, Region 3's guidance is silent on when to issue violation notices, and Minnesota's Fergus Falls Wetland Management District did not issue a violation notice or impose a fine for any of the 23 violations it recorded during 1986 through 1988, including 7 repeat violations.

Conversely, Region 6's guidance includes more specifics on when to issue a violation notice. The guidance requires that a notice be issued for a drainage violation if (1) the landowner or tenant had knowledge of the easement terms, (2) the violation is serious, or (3) a repeat violation has occurred. This guidance, however, is not always complied with. For example, of the 281 documented violations in 1986 through 1988 in Region 6, 192 involved improper drainage of wetlands. Because FWS district officials preferred to seek voluntary restoration of wetlands and they were sensitive to local resistance to federal acquisition of private property, only 11 of these violators were issued violation notices, which were generally accompanied by a \$100 fine.

SWAP Alone Cannot Stem the Decline in Migratory Waterfowl and Wetlands

Through swap, the federal government has invested millions of dollars to acquire wetlands for waterfowl—habitat that might otherwise have been lost to agriculture or other uses. In spite of these efforts, the loss and degradation of such habitat have continued as a result of agricultural practices that damage unprotected wetland habitat and make it easier for predators to prey on waterfowl and their eggs. Persistent drought conditions in the Prairie Pothole Region have also contributed to the failure of several North American waterfowl populations to rebound to earlier levels.

Although Fws officials believe that SWAP, as currently administered, is effectively protecting the 1.8 million acres of waterfowl habitat acquired under the program, they and others in federal and state governments are participating in programs and initiatives designed to increase the amount of productive habitat and to bring about a long-term increase in the number of waterfowl. Most of the federal government's programs to protect and preserve such wetlands, including those

in the Prairie Pothole Region, will be discussed in a GAO report to be issued later this year.

Conclusions

swap is but one of many programs or initiatives undertaken at the federal and state levels to help preserve the nation's wetlands and increase waterfowl populations. swap has achieved success in helping to preserve wetlands in the Prairie Pothole Region of the United States, owing in large part to effective efforts employed by Fws in enforcing easements. We believe the program could be made even better if Fws were to correct weaknesses we noted in the (1) documentation of waterfowl's use of wetlands under easement and (2) guidance involving the timeliness with which damaged wetlands are restored and the circumstances under which violators should be issued notices and assessed fines.

Recommendations to the Secretary of the Interior

To improve the effectiveness of SWAP, we recommend that the Secretary of the Interior direct the Director, FWS, to take the following actions:

- Establish procedures to ensure that wetland management district offices responsible for the program document the extent to which waterfowl are using wetlands.
- Issue agencywide timeliness standards for (1) performing on-the-ground inspections of suspected violations, (2) contacting landowners or tenants once violations have been confirmed, (3) completing restoration, and (4) following up to ensure that restoration is satisfactory (exceptions to these standards should be documented and approved by the head of the responsible wetland management district office).
- Issue guidance that specifies more clearly the circumstances under which easement violators should be issued violation notices and assessed fines.

We conducted our review between November 1989 and September 1991 in accordance with generally accepted government auditing standards. We interviewed and obtained information from Fws officials at the agency's headquarters in Arlington, Virginia; the offices of Regions 3 and 6 in Twin Cities, Minnesota, and Denver, Colorado, respectively; and at four wetland management district offices in three states. These four offices administer and enforce about 25 percent of Fws' swap easements. Also, we reviewed easement violation cases and financial and personnel

records at the offices of the two Fws regions and four wetland management districts. Appendix II contains more details concerning our objectives, scope, and methodology.

Although we did not obtain written agency comments, we discussed the results of our work with Interior officials and incorporated their comments where appropriate. These officials generally agreed with the facts presented in the report. Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the appropriate congressional committees; the Secretary of the Interior; the Director, Fws; and other interested parties and will make copies available to others upon request.

This work was performed under the direction of James Duffus III, Director, Natural Resources Management Issues, who can be reached at (202) 275-7756. Other major contributors are listed in appendix III.

Sincerely yours,

J. Dexter Peach

Assistant Comptroller General

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Abbreviations

FWS	Fish and Wildlife Service
GAO	General Accounting Office
SWAP	Small Wetlands Acquisition Program

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Unauthorized Activities Occurring on SWAP Easements

In general, recorded violations of easement conditions are categorized by the Fish and Wildlife Service (FWS) as either unauthorized filling, draining, leveling, or burning. The following cases describe a few of the 323 individual violations in our sample cases in the four FWS wetland management districts we visited.

• On July 31, 1986, Fws confirmed an unauthorized fill involving car bodies placed in a wetland that is protected under a Small Wetlands Acquisition Program (SWAP) easement in North Dakota. (See fig. I.1.) The car bodies were removed by the landowner from the wetland, and on March 9, 1987, Fws advised the landowner that the easement was in compliance.

Figure I.1: Car Bodies Placed in Wetland



Source: FWS.

 On April 13, 1988, Fws cited a landowner for an unauthorized rock fill in a wetland under a SWAP easement. (See fig. I.2.) After inspecting the restoration work on November 29, 1988, Fws determined that the restoration was satisfactory and that the landowner was in compliance with the easement agreement.

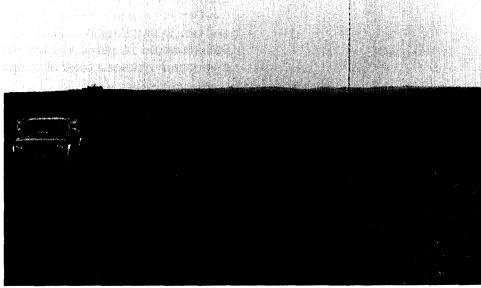
Figure I.2: Rock Fill Placed in Wetland



Source: FWS.

• On November 12, 1987, Fws discovered unauthorized drainage of a wetland in North Dakota. (See fig. I.3.) After several extensions of the restoration completion date, on November 1, 1989, Fws inspected the area and found the restoration work to be satisfactory.

Figure I.3: Unauthorized Drainage Ditch



Source: FWS.

Objectives, Scope, and Methodology

Concerned that lack of enforcement by FWS was resulting in the loss of wetlands through violations of easement terms, Representative John D. Dingell and the late Representative Silvio O. Conte asked us to evaluate FWS' enforcement of protection easements under SWAP. Specifically, they asked that we respond to the following questions:

- What financial and personnel resources has FWs used to ensure compliance with the terms of SWAP easement contracts?
- Who within FWS is responsible for enforcing and monitoring SWAP easements?
- What means and methods does FWS use to enforce SWAP policies and the terms of the SWAP easement contracts?
- What percentage of the acreage under SWAP easements is surveyed annually, and how many acres does this involve?
- How many acres of wetlands under SWAP easements have been destroyed as a result of noncompliance with the statutory requirements or the terms of the easement contracts?
- What plans does FWS have to improve the effectiveness of SWAP in preserving prairie wetlands?

As agreed, we limited our review of the financial and personnel resources devoted to the enforcement of SWAP easements to fiscal years 1986 through 1989 and our review of easement violations to fiscal years 1986 through 1988. We also agreed to limit our fieldwork to four geographically dispersed wetland management districts: three in FWS Region 6—Devils Lake and Kulm, North Dakota, and Madison, South Dakota—and one in FWS Region 3—Fergus Falls, Minnesota. These four districts include about 25 percent of the total acreage protected under SWAP easements and oversee a total of about 5,900 easement contracts.

To obtain information on the financial and personnel resources FWS uses to ensure compliance with the terms of the SWAP easement contracts, we relied on estimates by officials in FWS Regions 3 and 6 and in the four wetland management districts we visited. After fiscal year 1986, FWS' automated accounting system did not specifically account for costs or time charged to enforcing SWAP easements. We did, however, compare estimates provided by FWS to the amounts charged to this enforcement in prior years and found a high degree of consistency.

To determine who within FWS is responsible for enforcing and monitoring SWAP easements, we reviewed charts of FWS' organization, descriptions of officials' duties and responsibilities, enforcement manuals, and other guidance and interviewed appropriate officials.

Appendix II Objectives, Scope, and Methodology

To identify the means and methods FWS uses to enforce SWAP policies and easements, as well as the percentage of the acreage under SWAP easements surveyed annually, we reviewed the related procedural guidance and accompanied FWS officials on aerial surveillance flights and ground inspections of some of the acreage under easement contracts.

To identify the number and types of violations of easement terms, the percentage of the acreage under SWAP easements damaged through these violations, the status of the damaged wetlands, the guidance to be followed in restoring damaged wetlands and issuing violation notices and assessing fines, and the timeliness of restoration, we reviewed violation case files carried into 1986 from prior years and those recorded in 1986 through 1988 in the four wetland management districts we visited. We began with 1986 because it was the earliest year for which usable data were available and ended with 1988 to enable us to analyze case outcomes. Our universe included 40 open cases carried over from prior years and 245 cases recorded in 1986 through 1988: 143 in Devils Lake, 57 in Kulm, 54 in Madison, and 31 in Fergus Falls. These 285 cases involved 323 individual violations. Of these 285 cases, 253 had been closed as of December 31, 1989. Because these files do not contain information on the actual wetland acreage damaged, we relied on the estimates of officials at the FWS districts.

We also contacted representatives of state conservation agencies and private organizations interested in wetland protection in the Prairie Pothole Region, including state conservation agencies in Minnesota, North Dakota, and South Dakota; Ducks Unlimited; the National Wildlife Federation's Prairie Wetlands Resource Center; the Minnesota Board of Soil and Water Resources; and the Iowa Heritage Foundation.

To identify what plans FWS has to improve SWAP's effectiveness, we reviewed the work plans of FWS Regions 3 and 6 for fiscal years 1990 and 1991 and interviewed FWS officials at both regional offices as well as the four wetland management districts.

We conducted our review from November 1989 through September 1991 in accordance with generally accepted government auditing standards.

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