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Report to the Ranking Minority Member, Committee on Homeland Security and Governmental Affairs, U.S. Senate

September 2005

WATERS AND WETLANDS

Corps of Engineers Needs to Better Support Its Decisions for Not Asserting Jurisdiction

GAO-05-870

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GAO Accountability·Integrity·Reliability

Highlights

Highlights of GAO-05-870, a report to the Ranking Minority Member, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into federally regulated waters without first obtaining a U.S. Army Corps of Engineers (Corps) permit. Before 2001, the Corps asserted jurisdiction over most waters, including isolated, intrastate, nonnavigable waters, if migratory birds could use them. However, in January 2001, the U.S. Supreme Court concluded that the Corps exceeded its authority in asserting jurisdiction over such waters based solely on their use by birds. GAO was asked to examine, among other things, the (1) processes and data the Corps uses for making jurisdictional determinations; (2) extent to which the Corps documents decisions that it does not have jurisdiction; (3) extent to which the Corps is using its remaining authority to assert jurisdiction over isolated, intrastate, nonnavigable waters; and (4) extent to which the Corps and the Environmental Protection Agency (EPA) are collecting data to assess the impact of the court's January 2001 ruling.

What GAO Recommends

GAO is recommending that the Corps require detailed rationales for nonjurisdictional decisions and finalize with EPA the additional guidance to help the districts make certain jurisdictional decisions.

In commenting on the report, the Corps and EPA generally agreed with GAO's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-05-870.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Anu K. Mittal at (202) 512-3641 or mittala@gao.gov.

What GAO Found

The five Corps districts included in GAO's review generally used similar processes and data sources for making jurisdictional determinations. After the districts receive a request for a determination, a project manager will review the submitted data for completeness, request additional data from the applicant, as necessary, and analyze the data to decide whether any waters are jurisdictional under the act. Data reviewed by project managers include photographs and topographic, soils, and wetland inventory maps that show, among other things, where the proposed project is located, whether other agencies have identified waters on the property, and whether there appears to be a basis for waters to be considered federally regulated under the act. Site visits are generally conducted when maps and photographs are not sufficiently detailed to make determinations.

While GAO found that the Corps generally documents its rationale for asserting jurisdiction over waters or wetlands, it does not prepare similar documentation for nonjurisdictional determinations. Such rationales are important because determinations can be challenged by property owners and the public. GAO found that only 5 percent or less of the files in four of the five districts contained a detailed rationale, while 31 percent of the files in the fifth district contained such a rationale. The percentage of files that contained no rationale whatsoever as to why the Corps did not assert jurisdiction ranged from a low of 12 percent to a high of 49 percent in the five districts. The remaining files contained partial rationales.

Following the Supreme Court's January 2001 ruling, the Corps is generally not asserting jurisdiction over isolated, intrastate, nonnavigable waters using its remaining authority. Since January 2003, EPA and the Corps have required field staff to obtain headquarters approval to assert jurisdiction over waters based solely on links to interstate commerce. Only eight cases have been submitted, and none of these cases have resulted in a decision to assert jurisdiction. According to project managers, they are reluctant to assert jurisdiction over these kinds of waters because of the lack of guidance from headquarters and perceptions that they should not be doing so. Although the Corps has drafted a memorandum that contains guidance for the districts, EPA and the Corps have not yet reached agreement on the content of the document.

At EPA's request, over the last year, the Corps has collected data on field staffs' nonjurisdictional determinations, including limited data on wetlands impacted by the court's ruling. However, officials acknowledge that these data will be inadequate to assess the impacts of the ruling on wetlands jurisdiction. As a result, neither agency has conducted or plans to conduct an in-depth analysis of data already collected and they are re-examining their data collection efforts. Moreover, neither agency believes that an effective approach to fully assess the impacts of the ruling can be easily implemented because it would be resource intensive to do so and would require a vast array of data, some of which are not readily available.

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Abbreviations

EPA	Environmental Protection Agency
SWANCC	*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*

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GAO
Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, D.C. 20548

September 9, 2005

The Honorable Joseph I. Lieberman
Ranking Minority Member
Committee on Homeland Security
and Governmental Affairs
United States Senate

Dear Senator Lieberman:

Section 404 of the Clean Water Act prohibits most discharges of dredged or fill material into "waters of the United States" without first obtaining a permit from the U.S. Army Corps of Engineers (Corps). "Waters of the United States" include, among other things, navigable waters; interstate waters; intrastate waters, such as wetlands,[1] that if used or degraded, could affect interstate commerce; tributaries of these waters; and wetlands adjacent to these waters. Section 404 is intended to restore and maintain the physical, chemical, and biological integrity of the nation's waters while allowing reasonable development, and as such, it is the nation's primary wetlands protection program under the act. Each year, the Corps receives thousands of permit applications from project proponents, such as private property owners and developers, seeking to place fill material into waters or wetlands in order to build houses, golf courses, or commercial buildings, as well as to conduct other activities.

The first step in the regulatory process is to determine whether there are any waters or wetlands on a project site and, if so, whether they are "waters of the United States." The Corps determines whether it has jurisdiction over waters and wetlands by documenting their connections to navigable waters or interstate commerce, or by determining if the wetlands are adjacent to other "waters of the United States." If the Corps determines that a water or wetland is subject to federal jurisdiction under the act, project proponents who seek to fill in waters or wetlands as part of any developmental activities must first obtain a permit. As part of the permit evaluation process, the Corps requires that project proponents avoid,

[1]Wetlands are areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas. Wetlands play valuable ecological roles by reducing flood risks, recharging water supplies, improving water quality, and providing habitats for fish, aquatic birds, and other plants and animals, including a number of endangered species.

minimize, and compensate for the destruction or degradation of waters that fall under federal jurisdiction. A project proponent who disagrees with the Corps' jurisdictional determination can file an administrative appeal challenging the determination.

In 1986, the Corps stated in a preamble to the wetlands program regulations that it would assert federal jurisdiction over waters that are or would be used as, among other things, habitat by birds protected by migratory bird treaties.[2] This statement became known as the "migratory bird rule," and under it, the Corps could potentially assert jurisdiction over almost any body of water or wetland in the United States. In January 2001, however, in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (*SWANCC*),[3] the Supreme Court concluded that the Corps had exceeded its authority in asserting jurisdiction over isolated, intrastate, nonnavigable waters based solely on their use as habitat by migratory birds.

Following the decision, in January 2003, the Corps and the Environmental Protection Agency (EPA), which has primary authority and responsibility for implementing the Clean Water Act, issued a joint memorandum discussing the ruling's potential implications for federal jurisdiction under the Clean Water Act.[4] This memorandum stated that although *SWANCC* specifically involves isolated, intrastate, nonnavigable waters used as habitat by migratory birds, it raises questions about what connections, if any, to interstate commerce could be used to assert jurisdiction over isolated, intrastate, nonnavigable waters. Consequently, the memorandum instructed field staff to seek formal project-specific headquarters approval prior to asserting jurisdiction over isolated, intrastate, nonnavigable waters on the sole basis of the Corps' regulations at 33 C.F.R. § 328.3(a)(3). Under this section, federal jurisdiction extends to all waters, such as intrastate lakes and wetlands, if the use, degradation, or destruction of these waters could affect interstate commerce. In the aftermath of the *SWANCC* ruling, questions have been raised not only about which isolated, intrastate, nonnavigable waters and wetlands are now considered jurisdictional under

[2]51 *Fed. Reg.* 41206 (Nov. 13, 1986).

[3]531 U.S. 159 (2001).

[4]This joint memorandum was issued as part of an Advance Notice of Proposed Rulemaking. 68 *Fed. Reg.* 1991 (Jan. 15, 2003).

the act, but also about the indirect impact of the ruling on the Corps' resources for making determinations.

In February 2004, we reported that, since *SWANCC*, Corps districts have not consistently interpreted and applied federal regulations that define jurisdictional waters, including wetlands.[5] Because of these inconsistencies, we reported it was unclear whether different jurisdictional determinations would be made under similar situations.

For this study, you asked us to determine (1) the processes and data the Corps uses to make jurisdictional determinations; (2) the extent to which the Corps documents its decisions when it concludes that it does not have jurisdiction over certain waters and wetlands (nonjurisdictional determinations); (3) the process the Corps uses to allocate resources for making jurisdictional determinations; (4) the extent to which the Corps is asserting jurisdiction over isolated, intrastate, nonnavigable waters using its remaining authority in 33 C.F.R. § 328.3(a)(3); and (5) the extent to which the Corps and EPA are collecting data to assess the impact of *SWANCC*.

To examine these issues, we selected 5 of the Corps' 38 district offices—Chicago; Galveston, Texas; Jacksonville, Florida; Omaha, Nebraska; and St. Paul—from which to obtain detailed information. We selected 4 of these 5 districts because they made more nonjurisdictional determinations than any of the other 38 districts. We selected the fifth district—Galveston—because it also accounted for a large number of nonjurisdictional determinations and was located in a different geographic region than the other four districts. Altogether, these five districts accounted for 58 percent of the nonjurisdictional determinations the Corps made between April and December 2004. This time period was selected because prior to April 2004, data on the Corps' nonjurisdictional determinations were not readily available. We interviewed Corps officials in the selected districts, including project managers who make jurisdictional and nonjurisdictional determinations and appeals review officers who review appeals of determinations. We also reviewed 770 files for jurisdictional determination requests or permit applications for which Corps project managers determined there was no federal jurisdiction. In reviewing the Corps' nonjurisdictional determinations, we did not review other key aspects of

[5]GAO, *Waters and Wetlands: Corps of Engineers Needs to Evaluate Its District Office Practices in Determining Jurisdiction*, GAO-04-297 (Washington, D.C.: Feb. 27, 2004).

the program, such as the Corps' permitting process. Appendix I provides a more detailed description of our scope and methodology. We performed our work from June 2004 through July 2005 in accordance with generally accepted government auditing standards.

Results in Brief

Each of the five Corps districts we visited generally used a similar process and similar data sources for making jurisdictional determinations. This process involves four steps: (1) receiving a request for a jurisdictional determination or a permit application; (2) reviewing the submitted information for completeness; (3) requesting additional data from the project proponent, as necessary; and (4) analyzing the data to determine if the waters or wetlands are regulated under the Clean Water Act. Corps districts frequently use data from topographic, soil, and wetland inventory maps, as well as photographs to make these determinations. These data show, among other things, where the proposed project is located and whether there appears to be a basis for waters or wetlands to be federally regulated under the act, such as whether the site's elevations would allow water on the site to flow into "waters of the United States." According to Corps project managers, they generally visit project sites when photographs and maps do not provide sufficiently detailed information about the potential for a surface-water connection, such as through a culvert or shallow ditch, between any waters or wetlands located on the project site and off-site waters. In addition, they said a number of factors influence the types and amounts of data they review, such as the size and value of resources at risk and their confidence in the capability and integrity of any consultants the project proponents may have hired to prepare their permit applications.

Corps records provide limited information on the rationale for its decisions not to assert jurisdiction over certain waters and wetlands. Since August 2004, the Corps has required that project files include a standardized form that provides basic information about the project site. This form was developed to increase the level of consistency, predictability, and openness in the districts' reporting practices on jurisdictional determinations. The form also requires that project managers provide a rationale for their decisions to assert jurisdiction but does not require a similar rationale for nonjurisdictional determinations. A headquarters senior regulatory program manager told us that a rationale for nonjurisdictional determinations is not required because it was assumed that this information would be included elsewhere in the file. According to Corps appeals review officers and the Chief of the Regulatory Branch, all files

should contain a detailed, site-specific rationale that explains how and why the determination was made, so that the Corps can quickly and easily respond to any inquiry about their determinations. For example, the Corps has received several requests from environmental groups for information on all nonjurisdictional determinations made by its 38 districts. We found that only 5 percent or less of the files in four of the five districts contained a detailed rationale, while 31 percent of the files in the fifth district contained such a rationale. The percentage of files that contained no rationale whatsoever as to why the Corps did not assert jurisdiction ranged from a low of 12 percent to a high of 49 percent in the five districts. The remaining files contained partial rationales.

For the five districts we examined, resource allocations for making jurisdictional determinations were generally included as part of the resources allocated to permit processing. These allocations are based on historical allocations and regulatory program priorities, such as issuing permits in a timely manner. According to district officials, although they do not know how much time is spent conducting jurisdictional determinations, their ability to effectively perform certain activities, such as conducting site visits, has been impacted in the past several years because their workloads have increased and their budgets have not kept pace. For example, officials in several districts told us that they have been unable to visit many project sites even though site visits may be the best way to determine whether a water or wetland is jurisdictional. In 2004, the Corps initiated a project to obtain detailed estimates on the amount of time required to carry out various aspects of the regulatory program, including making jurisdictional determinations. In 2005, the Corps used preliminary results of this project, in part, to allocate total resources for fiscal year 2005 to the different districts. According to Corps officials, these estimates will be refined as the agency gains more experience in using them. However, we found that the agency will continue to face challenges in using these estimates to develop budget proposals and allocate resources because the Corps' current data management systems do not yet provide accurate and complete data on the various activities undertaken by each of the districts, including making jurisdictional determinations. The Corps is currently phasing in a new data management system, which is due to be implemented by the end of fiscal year 2006 and which should provide much of the data needed.

Subsequent to the *SWANCC* ruling, the Corps is generally not asserting jurisdiction over isolated, intrastate, nonnavigable waters using its remaining authority in 33 C.F.R. § 328.3(a)(3). In our 2004 report, we found

that between January 2003 and January 2004, the districts sought to use this provision to assert jurisdiction only eight times. Neither EPA nor the Corps authorized use of this provision as the sole basis for asserting jurisdiction in six of these cases, while two are still pending. Since January 2004, a Corps official stated that no additional requests have been submitted to headquarters. In the five districts we reviewed, Corps officials said they generally do not consider seeking jurisdiction over isolated, intrastate, nonnavigable waters on the sole basis of 33 C.F.R. § 328.3(a)(3) because (1) headquarters has not provided detailed guidance on when it is appropriate to use this provision; (2) they believe that headquarters does not want them to use this provision; (3) they were concerned about the amount of time that might be required for a decision from headquarters; or (4) few isolated, intrastate, nonnavigable waters were in their districts whose use, degradation, or destruction could affect interstate commerce. In January 2005, the Corps drafted a memorandum of agreement that establishes procedures and clarifies the process for field staff on the use of 33 C.F.R. § 328.3(a)(3) to assert jurisdiction. It also establishes a process for the Corps and EPA to consult on such requests, including time frames for responding to a request. As of July 2005, EPA and the Corps had not yet finalized the agreement.

Neither the Corps nor EPA is collecting data to fully assess the impact of *SWANCC* on federal jurisdiction over isolated, intrastate, nonnavigable waters or wetlands. The Corps is collecting some data for EPA on its nonjurisdictional determinations in an effort to obtain information to respond to congressional, project proponent, and public concerns about how field offices are applying the *SWANCC* ruling. However, the data being collected are incomplete and of limited use to assess the impact of *SWANCC* on the nation's aquatic resources. Specifically, these data do not (1) reflect the actual size of waters or wetlands that the Corps considers nonjurisdictional; (2) indicate the precise size of the waters or wetlands that are being degraded or destroyed; or (3) indicate the functional value of the waters or wetlands, such as their use as habitat for plant or animal species or as storage for storm-water runoff. Given the limitations of these data and current resource constraints, neither the Corps nor EPA have conducted or plan to conduct an in-depth analysis of data already collected, and both agencies are re-examining their data collection efforts. Moreover, due to current resource constraints and the vast amount of data that would be needed, agency officials do not believe that an appropriate approach can be easily developed that would allow them to fully assess the impact of *SWANCC* on federal jurisdiction of waters and wetlands.

To provide greater transparency in the Corps' processes for making nonjurisdictional determinations, we are recommending that the Secretary of the Army require the Corps to include in its project files explanations for nonjurisdictional determinations as it does for its jurisdictional determinations, and that these explanations be detailed and site-specific. We are also recommending that the Secretary of the Army, through the Corps, and the Administrator of EPA complete the process of jointly developing procedures for districts to follow when they would like to assert jurisdiction based solely on 33 C.F.R. § 328.3(a)(3). In commenting on the report, the agencies generally agreed with our recommendations.

Background

The Clean Water Act prohibits the discharge of pollutants into "navigable waters," which are defined in the act as "waters of the United States," without a permit. The act's objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Congress's intent in passing the act was to establish an all-encompassing program of water pollution regulation. To this end, the act establishes several programs and authorizations designed to protect "waters of the United States," including

- section 303, which calls for development of water quality standards for "waters of the United States";
- section 311, which establishes a program for preventing, preparing for, and responding to oil spills that occur in "waters of the United States";
- section 401, which establishes authority for state water quality certification of federally issued permits that may result in any discharge into "waters of the United States";
- section 402, which establishes a permitting system to regulate point source discharges of pollutants into "waters of the United States";[6, 7] and

[6]Point source discharges are those that emanate from discrete conveyances such as pipes or man-made ditches.

[7]States can be authorized to carry out the section 402 program, and, according to EPA, 42 states administer 402 permits within their jurisdictions.

- section 404, which prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the Corps.[8]

EPA has primary responsibility for carrying out the act, including final administrative responsibility for interpreting "waters of the United States," a term that governs the scope of all other programs under the Clean Water Act.[9] EPA and Corps regulations define "waters of the United States" for which a section 404 permit must be obtained to include, among other things, (1) interstate waters; (2) waters that are or could be used in interstate commerce; (3) waters, such as wetlands, whose use or degradation could affect interstate commerce; (4) tributaries of these waters; and (5) wetlands adjacent to these waters, other than waters that are themselves wetlands. In addition to the Clean Water Act, some state and local governments have developed programs to protect waters, including wetlands, either under state statutes or local ordinances or by assuming responsibility for section 404 permitting responsibilities.[10]

EPA established, in consultation with the Corps, the substantive environmental protection standards that project proponents must meet to obtain a permit for discharging dredged or fill material into "waters of the United States," while the Corps administers the permitting responsibilities of the program. The day-to-day responsibilities for implementing the section 404 program have been delegated to 38 Corps district offices, with the Corps' divisions and headquarters providing oversight of the program. In fiscal year 2005, the Corps' regulatory program budget was $144 million—a 2 percent increase over its fiscal year 2004 funding level.[11] The districts processed about 86,000 permits in fiscal year 2003. Figure 1 shows

[8]Section 404(e) authorizes the Corps to develop general permits for categories of activities having minimal adverse environmental impact. Section 404(f) identifies activities exempt from the permitting requirement, including certain ongoing farming activities. Section 404(g) establishes a process by which states (and tribes) may assume the section 404 permitting program.

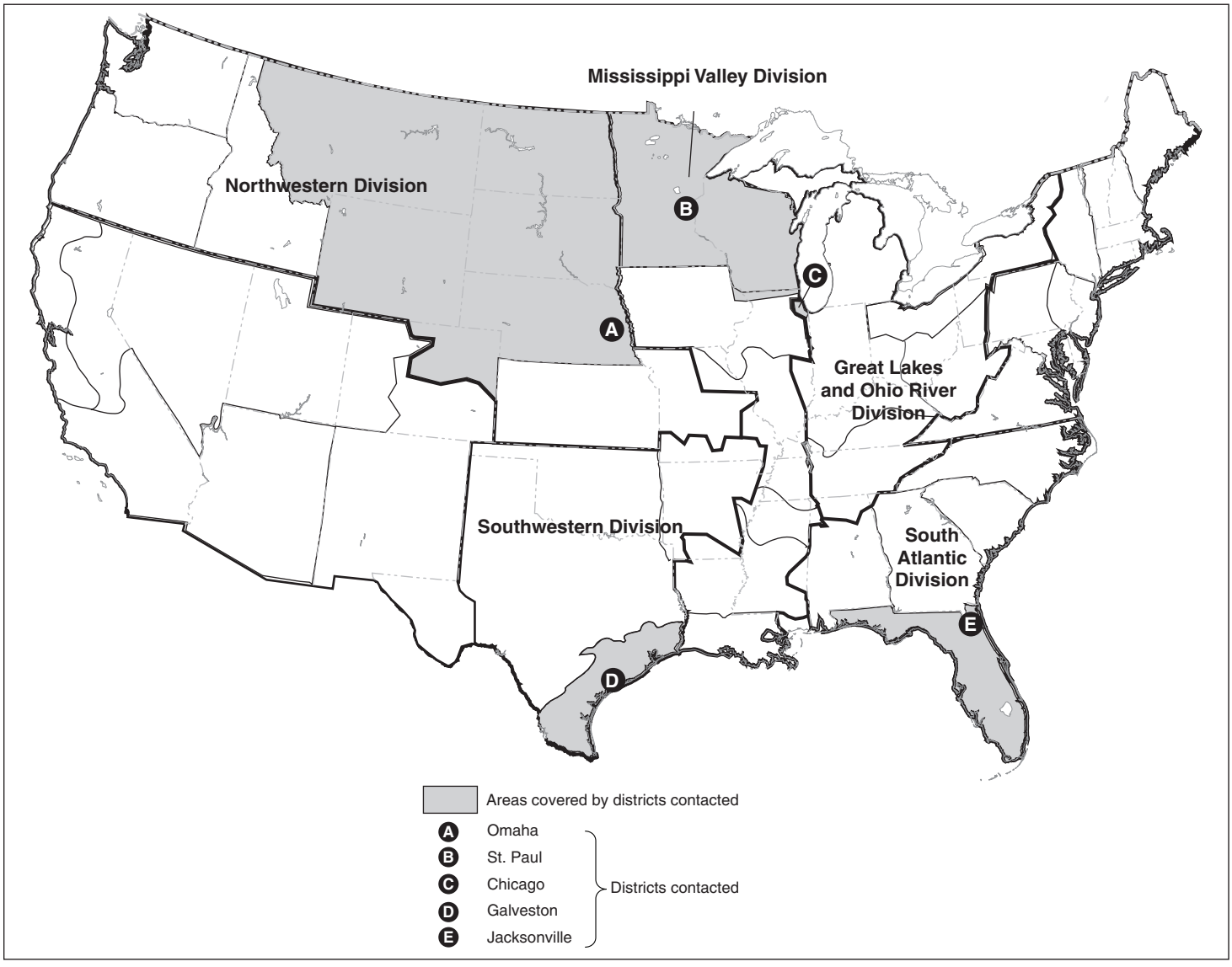
[9]43 Op. Atty. Gen. 197 (1979).

[10]EPA has authorized two states—New Jersey and Michigan—to implement their own permitting programs under section 404.

[11]Funds are also used for issuing permits under the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), which, among other things, prohibits the building of structures that could impede navigation, unless approved; and the Marine Protection, Research and Sanctuaries Act of 1972 as amended (33 U.S.C. § 1413), which requires permits for transporting dredged material for ocean dumping.

the locations of 5 of the 8 Corps divisions and 38 districts that we contacted as part of our review. These include the Chicago, Galveston, Jacksonville, Omaha, and St. Paul districts.

Figure 1: Map of Corps Divisions and Districts That GAO Reviewed

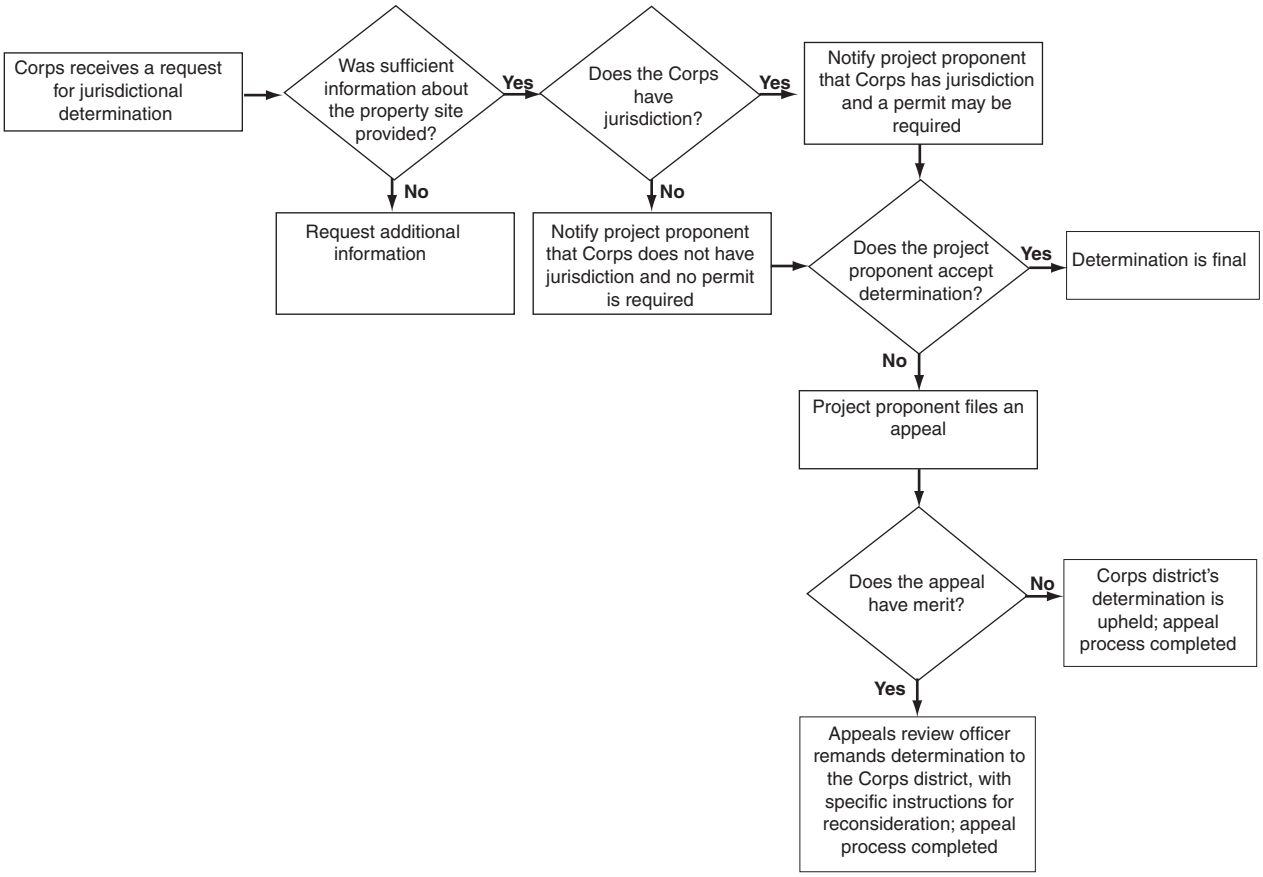


Source: U.S. Army Corps of Engineers.

The first step in the regulatory process is to determine whether there is any water or wetland[12] on the project site and, if so, whether the water or wetland is a "water of the United States." The Corps determines if the water or wetland is a "water of the United States" and, thus, whether it has jurisdiction, by documenting any connections of the water or wetland on the site to any downstream navigable water or interstate commerce, or by determining if the wetland is adjacent to these waters. If the Corps determines that a water or wetland is jurisdictional but a project proponent disagrees, the proponent can file an administrative appeal challenging the Corps' determination. Appeals review officers, located at Corps divisions, are responsible for reviewing the administrative records for approved jurisdictional determinations and determining if the appeals have merit. Project proponents may also subsequently file legal actions in federal court if they disagree with the Corps' final decision on an appeal. Figure 2 shows the Corps' decision-making process for a jurisdictional determination.

[12]To be considered a wetland, the water must generally meet the guidelines set forth in the Corps' 1987 *Corps of Engineers Wetlands Delineation Manual*, which addresses hydrology, soils, and plants.

Figure 2: Decision Tree Flow Chart for the Corps' Jurisdictional Determination Decision-Making Process



Source: GAO analysis of Corps and EPA regulations.

If the waters or wetlands are found to be jurisdictional, project proponents who want to discharge dredged or fill material into waters or wetlands as part of development activities on the property may be required to submit an application to obtain a 404 permit.[13] In evaluating permit applications, the Corps requires the project proponent to take actions to avoid, minimize, and compensate for the potential impact of destroying or degrading "waters of the United States." Under guidelines issued by EPA, the Corps may not authorize a discharge of dredged or fill material if there is a practicable alternative that would have less significant adverse environmental consequences.[14] According to the Corps, under this regulation, it can only authorize the least environmentally damaging, practicable alternative.

The Corps' implementation of the section 404 program changed significantly in January 2001 when the Supreme Court ruled in *SWANCC* that the Clean Water Act did not authorize the Corps to require a permit for filling an isolated, intrastate, nonnavigable water where the sole basis for the Corps to assert regulatory authority was that the water had been used as habitat by migratory birds.[15] This provision, included in a preamble to regulations issued in 1986, indicated that jurisdictional waters include waters that "are or would be used as habitat by birds protected by migratory bird treaties," or that "are or would be used as habitat by other migratory birds that cross state lines."[16, 17] Under this interpretation, nearly all waters and wetlands in the United States were potentially subject to the

[13]Permits are not required for exempt activities under section 404(f), such as certain ongoing farming and silviculture operations. A general permit may be available as an alternative to an individual permit for a project which involves activities that the Corps has determined have minimal adverse effects, both individually and cumulatively. The vast majority of projects permitted each year are covered by such general permits.

[14]40 C.F.R. § 230.10(a).

[15]*SWANCC* involved an abandoned sand and gravel pit, containing several permanent and seasonal ponds at which migratory bird species had been observed. In striking down the migratory bird rule, the Supreme Court stated that Congress's use of the phrase "waters of the United States" to define navigable waters did not constitute a "basis for reading the term 'navigable waters' out of the statute" and that "it is one thing to give a word limited effect and quite another to give it no effect whatever." 431 U.S. at 172.

[16]The preamble also addressed (1) waters that are or would be used as habitat for endangered species, and (2) waters used to irrigate crops sold in interstate commerce.

[17]EPA made a similar interpretation in preamble language in 1988. 53 *Fed. Reg*. 20765 (June 6, 1988).

Corps' jurisdiction. According to the Chief of the Regulatory Branch, certain categories of waters or wetlands may be more at risk for a determination of no jurisdiction as a result of *SWANCC*. These potentially geographically isolated waters include prairie potholes, playa lakes, and vernal pools. (See fig. 3.)

Figure 3: Examples of Potentially Isolated Waters That May Be More at Risk for a Nonjurisdictional Determination as a Result of *SWANCC*

Prairie potholes are found most often in the upper Midwest, especially Minnesota, North Dakota, South Dakota, and Wisconsin. Many species of North American waterfowl are dependent on the potholes for breeding and feeding. In addition to supporting waterfowl, prairie potholes also absorb surges of rain, snowmelt, and floodwater, reducing the risk and severity of downstream flooding.

Playa lakes are round hollows in the ground in the southern High Plains of the United States. They are ephemeral, meaning that they are present only at certain times of the year. Playas support an array of wildlife. Waterfowl, mayflies, dragonflies, salamanders, bald eagles, endangered whooping cranes, jackrabbits, raccoons, and amphibians can all be found at playa lakes.

Vernal pools occur in the mediterranean climate conditions of the West Coast. They are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools provide habitat for numerous rare plants and animals that are able to survive and thrive in these harsh conditions. In addition, birds such as egrets, ducks, and hawks use vernal pools as a seasonal source of food and water.

Source: EPA.

The extent to which the reasoning in *SWANCC* applies to waters other than those specifically at issue in that case has been the subject of considerable debate in the courts[18] and among the public. Some groups have argued that *SWANCC* precludes the Corps from regulating virtually all isolated, intrastate, nonnavigable waters, as well as nonnavigable tributaries to navigable waters, while others have argued that it merely prohibits the regulation of isolated, intrastate, nonnavigable waters and wetlands solely on the basis of their use as habitat by migratory birds. In January 2003, the Corps and EPA issued a joint memorandum to clarify the impacts of the *SWANCC* ruling on federal jurisdiction over waters and wetlands. The guidance called for Corps and EPA field staff to continue to assert jurisdiction over traditional navigable waters, their tributaries, and adjacent wetlands. It also directed field staff to make jurisdictional determinations on a case-by-case basis, considering the guidance in the memorandum, applicable regulations, and any relevant court decisions. It also noted that in light of *SWANCC*, it is uncertain whether there remains any basis for jurisdiction over any isolated, intrastate, nonnavigable waters. While the *SWANCC* ruling specifically addressed the use of migratory birds as a basis for asserting jurisdiction over these waters, it did not address other bases cited in Corps regulations as examples for asserting jurisdiction. These bases include intrastate waters whose use, degradation, or destruction could affect interstate commerce, including waters (1) that are or could be used by interstate or foreign travelers for recreational or other purposes, (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or (3) that are used or could be used for industrial purposes by industries in interstate commerce. Because of this uncertainty, the memorandum instructed the field staff to seek formal project-specific headquarters approval prior to asserting jurisdiction over such waters based solely on links to interstate commerce.

While EPA and Corps regulations provide a framework for determining which waters are within federal jurisdiction, they leave room for judgment and interpretation by the Corps districts when considering jurisdiction

[18]Since *SWANCC*, several federal appellate courts have considered the scope of Clean Water Act jurisdiction in cases other than those involving the migratory bird rule. A majority of the courts have read the *SWANCC* decision narrowly. These courts (the fourth, sixth, seventh, and ninth circuit courts of appeals) have found, for example, that *SWANCC* only affects isolated waters and that jurisdiction can be asserted over waters that have indirect hydrological connections, such as by drainage ditches, canals, or pipes, with navigable waters. The fifth circuit court interprets the decision broadly, allowing jurisdiction to be asserted only if the body of water is actually navigable or directly adjacent to a navigable body of water, which could limit jurisdiction over tributaries and wetlands.

over, for example, adjacent wetlands, tributaries, and ditches and other man-made conveyances. Before *SWANCC*, the Corps generally did not have to be concerned with such factors as adjacency, tributaries, and other aspects of connection with an interstate or navigable water body if the wetland or water body qualified as a jurisdictional water on the basis of its use as habitat by migratory birds. In our February 2004 report, we found that Corps districts and staff interpreted and applied federal regulations differently when determining what wetlands and other waters fall within federal jurisdiction. For example, districts differ in their use of proximity as a factor in making determinations. One district required that the isolated water be within 200 feet of other "waters of the United States"; another required a distance of 500; and still others had no minimum requirement. We concluded that it was unclear whether or to what degree these variations would result in different jurisdictional determinations in similar situations, in part, because Corps staff consider many factors when making these determinations. In addition, few Corps districts make public the documentation that specifies the interpretation and application of the regulations they used to determine whether a water or wetland is jurisdictional. Consequently, project proponents may not clearly understand their responsibilities under section 404 of the Clean Water Act. We recommended, among other things, that the Corps survey district offices to determine how they are interpreting and applying the regulations and evaluate if differences need to be resolved. In response, the Corps conducted a preliminary survey in 2004 and a more detailed survey in 2005. As of July 2005, the Corps was in the process of evaluating the districts' responses to the 2005 survey.

Corps Districts Generally Use Similar Processes and Data Sources When Making Jurisdictional Determinations

Each of the five Corps districts we visited generally used a similar process and similar data sources for making jurisdictional determinations. The districts use a four-step process that consists of (1) receiving a request for a jurisdictional determination or a permit application; (2) reviewing the submitted information for completeness; (3) requesting additional data from the project proponent, as necessary; and (4) analyzing the data to determine if the waters or wetlands are regulated under the Clean Water Act. Corps districts also used similar data to make these determinations, which frequently included topographic, soil, and wetland inventory maps as well as photographs. These data show, among other things, where the proposed project is located and whether there appears to be a basis, such as whether the site's elevations would allow water on the site to flow into "waters of the United States," for a water to be regulated**.** The Corps generally conducts site visits when these data do not sufficiently

demonstrate the nature and extent of any connection between an on-site water to a "water of the United States." According to Corps project managers, a number of factors influence the types and amounts of data they review, such as the size and value of resources at risk and their confidence in the capability and integrity of any consultants the project proponents have hired to prepare their permit applications.

Corps Districts Use a Four-Step Process to Make Jurisdictional Determinations

In making jurisdictional determinations, project managers in each of the five districts we visited proceed through the following four steps:

- *Receiving a request for a jurisdictional determination or a permit application.* The request is submitted by a project proponent, who may be a property owner or the owner's authorized agent, such as a consultant, or a developer. At a minimum, the request must clearly identify the property and the boundaries of the project site—either with a site location map or with another map that defines the project boundaries—as well as the name of the project proponent, a person to contact, and permission to go onto the project site in the event that a site visit is to be conducted.

- *Reviewing the submitted information for completeness.* The project manager assigned to the project reviews the information to ensure that the request is signed by the project proponent and that it contains the minimum required information. The project manager also reviews the information to ensure that it is sufficient to locate the property. The amount and type of information the Corps requests that the project proponent submit may vary by type of applicant and project as well as the extent and functional values of the water resources that may be impacted. For example, residential homeowners who are requesting a determination for their home sites are generally not expected to submit more than the minimum amount of information. In contrast, the districts may request much more detailed information from consultants who are preparing jurisdictional requests or permit applications for commercial property owners. For example, the Jacksonville District recommends that requests be accompanied by aerial photographs; a legible survey, plat drawing, or other parcel plan showing the dimensions of the property; and a list of other maps that provide additional information about the project site such as the types of soils at the site.

- *Requesting additional data from the project proponent, as necessary.* If project managers find that information submitted does not sufficiently

identify the property or the nature of the project, they will informally or formally request additional information. The Corps will not proceed with a jurisdictional determination until it has received all requested information.

- *Analyzing the data to determine if the Corps has jurisdiction*. Once the requested information has been received, the project manager will analyze the data to determine if the waters or wetlands on the project site are connected to any downstream navigable waters that could be or are used for interstate commerce, or adjacent to such waters. If the Corps has jurisdiction, it defines the limits of federal jurisdiction by, for example, identifying high tide lines or ordinary high water marks. If the waters include wetlands, the project manager must also identify the boundaries of the wetlands—that is, conduct what is known as a wetland delineation.[19]

Corps Districts Use Similar Data Sources to Make Jurisdictional Determinations

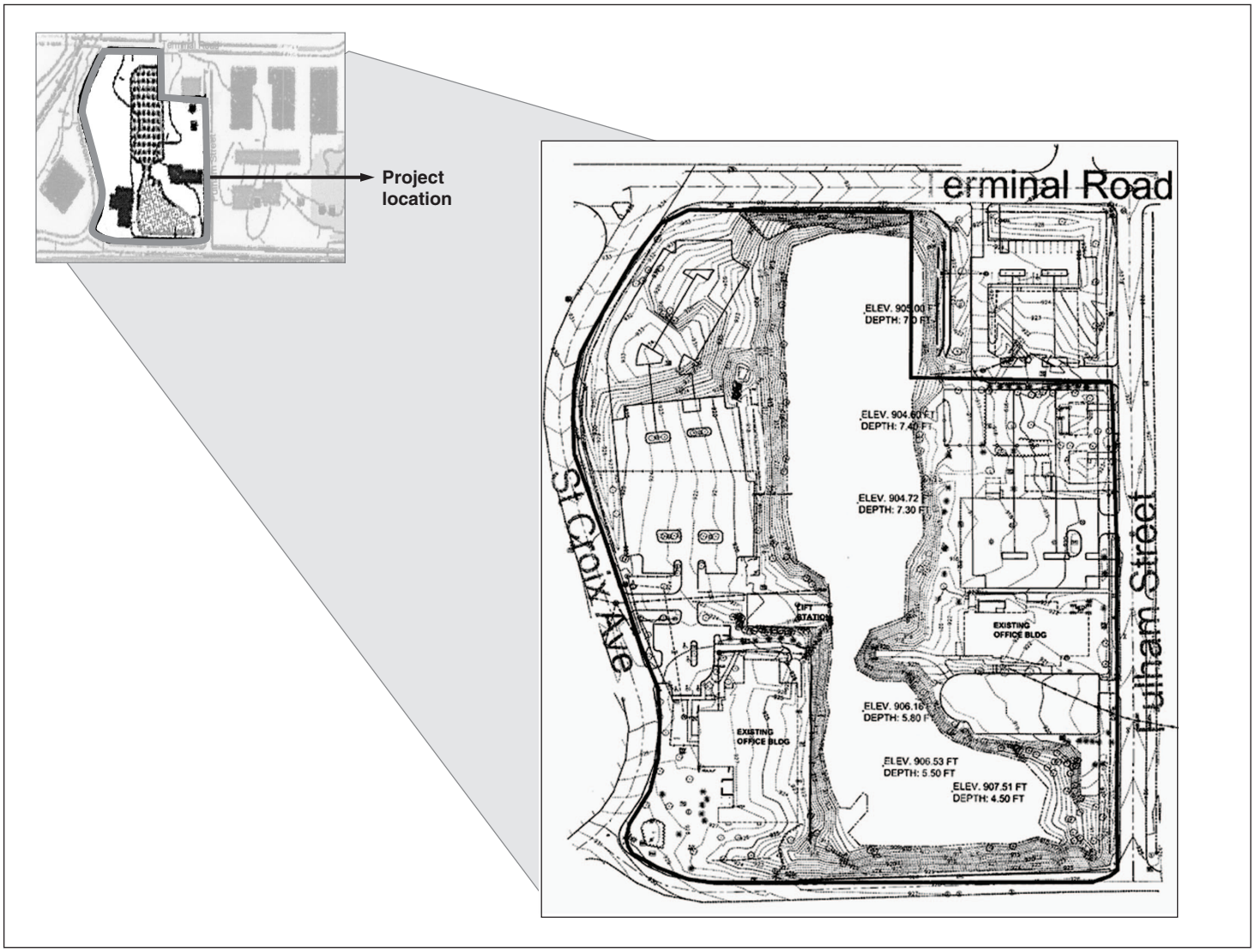
Project managers in the five districts we visited generally use similar data sources to make their jurisdictional determinations. The most commonly used data include the following:

- *Topographic maps*. Topographic maps show the shape of the Earth's surface through contour lines, which are imaginary lines that join points of equal elevation on land. Such contours make it possible to measure the height of hills and mountains and the depth of swales and valleys. Widely spaced contours or an absence of contours means that the ground slope is relatively level. Contours that are very close together represent steep slopes. It is often possible to use contours to determine the direction of water flow, and potential connections to other waters. Topographic maps also show symbols representing features such as roads, railroads, streets, buildings, lakes, streams, irrigation ditches, and vegetation. In the five districts we reviewed, 590 of the 770 jurisdictional determination request or permit application files where the Corps' project managers determined there was no federal jurisdiction included a topographic map. This ranged from a low of 64 percent of the Jacksonville District's files (89 of 140 files) to a high of 89 percent of both the Galveston District's (58 of 65) and the St. Paul District's (140 of

[19]The Corps generally requires that wetlands meet three conditions: (1) frequent or prolonged presence of water at or near the soil surface, (2) hydric soils that form under flooded or saturated conditions, and (3) plants that are adapted to live in these types of soil.

158) files. (App. II contains district-specific information on, among other things, the number of files that contained different types of data.) Figure 4 shows topographic maps used to identify a project location as well as the detailed surface contours of the project site.

Figure 4: Topographic Maps Showing Project Location and Detailed Surface Contours



Sources: St. Paul District; Bonestroo Rosene Anderlik & Associates (topographic maps).

- *Soil survey maps.* A soil survey map shows the types or properties of soil on a project site. There are over 20,000 different kinds of soil in the United States and they differ depending on how, where, and when they were formed. Soil is altered by the interactions of climate, surface contours, and living organisms over time and has many properties that fluctuate with the seasons. For example, it may be alternately cold and warm or dry and moist. Similarly, the amount of organic matter will fluctuate over time. Such maps can help indicate whether waters or wetlands on a project site have any hydrologic relationship or connection. In the five districts we reviewed, 404 of the 770 files included a soil survey map. This ranged from a low of 17 percent of the Omaha District's files (43 of 257) to a high of 82 percent of the Chicago District's files (123 of 150). Figure 5 shows a soil survey map superimposed onto an aerial photograph. The project location is the same as in figure 4.

Figure 5: A Soil Survey Map the Corps Used to Make a Jurisdictional Determination

Differentiation between soil types

Project site boundary

Soil type 1027 is "udorthents, wet substratum," which indicates that the area was previously a wetland that has since been filled with soil or other material.

Soil type 1039 is "urban land," which indicates that 90 percent or more of the soil has been altered or obscured by impervious surfaces such as buildings and paved parking lots.

Soil type W indicates that the area is covered by surface water.

Soil type 860D is "urban land, Hayden-Kingsley complex, 15 percent to 25 percent slope." This indicates that while up to 90 percent of the soil has been altered and obscured by some impervious surfaces, the remaining soil is a combination of fine sandy and brown sandy loam having a hilly to steep slope.

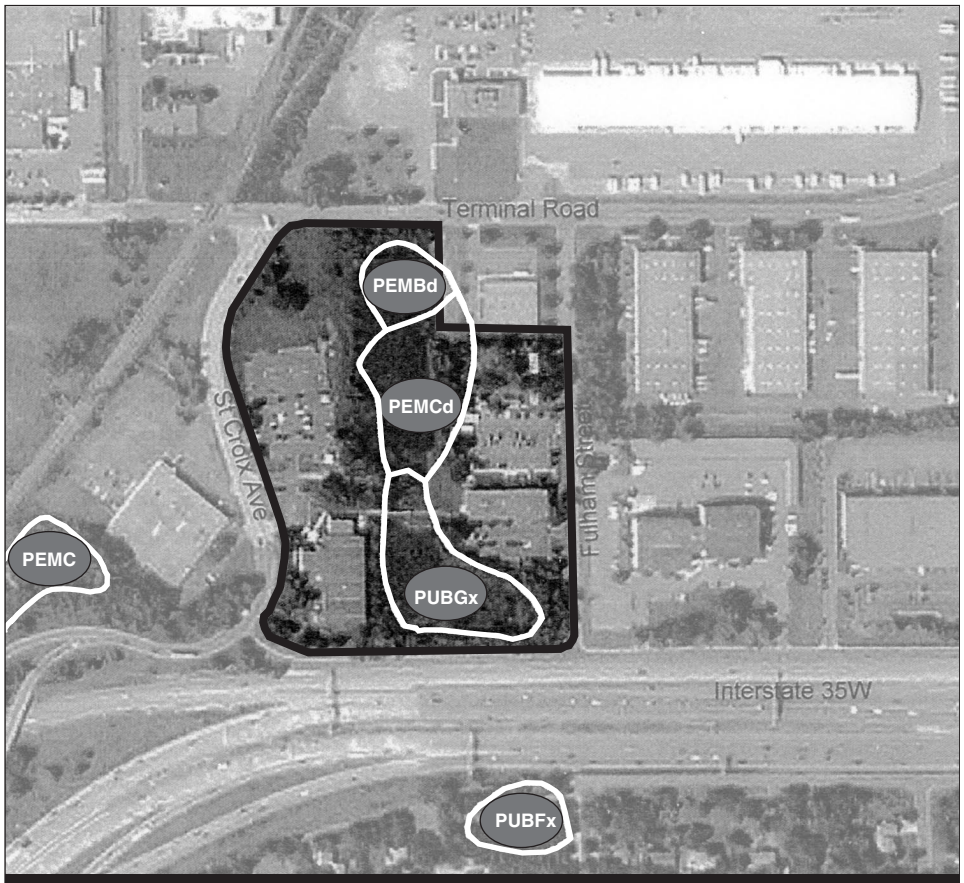
Soil type 861C is "urban land, Kingsley complex, 3 percent to 15 percent slope." This indicates that while up to 90 percent of the soil has been altered and obscured by some impervious surfaces, the remaining soil is brown sandy loam having an undulating to hilly slope.

Sources: St. Paul District; Bonestroo Rosene Anderlik & Associates (soil survey map).

- *National Wetlands Inventory maps.* A wetlands inventory map indicates the potential and approximate location of waters or wetlands as well as wetland types. Most of these maps were produced using aerial photography from the 1980s. The maps also classify the wetlands by type, such as a forested wetland or a scrub and shrub wetland. In the

five districts we reviewed, 401 of the 770 files included a wetlands inventory map. This ranged from a low of 11 percent of the Jacksonville District's files (15 of 140) to a high of 90 percent of the Chicago District's files (135 of 150). Figure 6 shows a wetlands inventory map superimposed onto an aerial photograph.

Figure 6: A National Wetlands Inventory Map the Corps Used to Make a Jurisdictional Determination



Water and wetland sites

Project site boundary

P = indicates a nontidal wetland.

EM = indicates that the types of plants are erect, rooted, herbaceous plants that are adapted to water and that are present for most of the growing season in most years.

B = indicates the ground is saturated for extended periods during the growing season, but surface water is seldom present.

d = indicates that the water level has been artificially lowered, but the area is still classified as wetland because the soil moisture is sufficient to support plants adapted to water.

C = indicates that the wetland is seasonally flooded.

G = indicates that surface water is present throughout the year except in years of extreme drought.

x = indicates that the wetland lies within a man-made basin or channel.

F = indicates that the wetland is semipermanently flooded.

Sources: St. Paul District; Bonestroo Rosene Anderlik & Associates (wetlands inventory map).

- *Photographs.* The Corps can use aerial and ground photographs to determine if waters or wetlands are located on a project site and to identify other structures on the site that may provide pathways for water to travel from one water body to another. Such photographs are available from a number of sources, including the project proponents. In addition, aerial photographs are available from the Department of Agriculture's Natural Resources Conservation Service showing wetlands on private farms that, in return for federal subsidies, have been preserved instead of being turned into cropland. In the five districts we reviewed, 562 of the 770 files included aerial photographs. This ranged from a low of 44 percent of the Omaha District's files (112 of 257) to a high of 91 percent of both the Chicago District's (137 of 150) and the Galveston District's (59 of 65) files. Similarly, 320 of the 770 files included ground photographs. This ranged from a low of 26 percent of the Jacksonville District's files (36 of 140) to a high of 63 percent of the Chicago District's files (95 of 150).

The Corps uses these maps and photographs not only to provide unique information about the site but also to corroborate information about a site. For example, the Corps can compare National Wetlands Inventory maps with topographic maps to help confirm whether there are waters or wetlands on a project site. The National Wetlands Inventory map could also alert the Corps to the types of waters or wetlands on the site. If the land has been used for growing crops, the Corps can obtain Natural Resources Conservation Service aerial photographs to determine if that agency has verified the existence of wetlands on that particular site. This information can then be used in examining aerial or site photographs provided by the project proponent.

Currently, project managers can use online resources for much of the data they need to make jurisdictional determinations. For example, many topographic maps and aerial photographs are available through online sources. In addition, project managers in all of the districts we visited can retrieve more sophisticated versions of aerial photographs, such as color-infrared photographs and digital orthophoto quadrangles, which are computer-generated images of aerial photographs that have been enhanced to better view the ground. Similarly, project managers in all five districts have the ability to superimpose different maps, such as soil survey maps, onto aerial photographs. In some cases, they can produce one map that shows the topography, wetlands, and soils present on a property. According to several project managers we contacted, this ability provides them with a

more comprehensive view of the status of waters or wetlands at individual project sites.

As can be seen in the following examples, some districts may also use other data sources that are specific to their district in making jurisdictional determinations.

- The Galveston District relies on maps that designate flood-prone areas—areas that are likely to be flooded. These maps, produced by the Federal Emergency Management Agency, are used for insurance purposes. According to the Galveston District's policy, if a water or wetland is in an area designated by the agency as a flood zone, the water or wetland will generally be considered adjacent and fall within the Corps' jurisdiction.

- The St. Paul District relies on the Southeastern Wisconsin Regional Planning Commission as a resource for maps for seven counties, which include the city of Milwaukee. The commission prepares maps for a variety of purposes, such as transportation planning. The maps include topographic maps as well as existing land-use maps, some of which identify waters and wetlands. Its digital land-use inventory is updated every 5 years. In addition, the state of Wisconsin compiles its own wetland inventory maps and, as a result, Corps project managers may rely less on National Wetlands Inventory maps when determining jurisdiction. Similarly, the state of Minnesota has developed public waters inventory maps that Corps project managers can access.

- In the Chicago District, which encompasses six counties, project managers can rely on more detailed wetland identification maps that some of the counties have prepared with funding received from EPA as part of its Advance Identification of Disposal Areas program.[20]

According to project managers, the number of data sources and the specific data they use to make a jurisdictional determination can vary, depending on the nature of the data and the project site. For example, according to one project manager, if the project site is a 5-acre flat piece of

[20]The Advance Identification of Disposal Areas program identifies wetlands and other waters that are generally suitable for the discharge of dredged and fill material. The information developed by this program can then be used by local governments to aid in zoning, permitting, and land acquisition decisions.

property that contains a one-quarter-acre wetland, and the nearest tributary to a "water of the United States" is 5 miles away, the project manager would not necessarily decide to visit the site to make a determination that the wetland was not jurisdictional. In contrast, according to this project manager, a 1,000-acre site that has 25 different waters and wetlands totaling 200 acres and a series of ditches, and is near a tributary to a "water of the United States," could warrant several site visits.

The use of a consultant to prepare a jurisdictional determination request or a permit application can also affect the Corps' decision on what data to review. Each district maintains a list of consultants whom residential homeowners and developers can use, although the Corps does not advocate or recommend specific consultants or require that only those consultants on its lists be used. As a result, the list can contain a number of consultants with varying levels of technical expertise. According to several project managers, if they have extensive experience with a particular consultant and trust that consultant's work, they are more likely to limit their review to the data submitted with the request, including any data on the types of soils, plants, and hydrology the consultant may have collected for use in delineating wetlands, along with questioning the consultant rather than independently verifying the information with their own data sources. In the five districts we reviewed, consultant data were submitted for 571 of the 770 projects whose files we reviewed.[21] The percentage of projects where consultant data were submitted varied by district, from a low of 55 percent of the Omaha District's projects (140 of 255 files) to a high of 94 percent of the Jacksonville District's projects (131 of 140 files).

Several project managers cautioned that the data represented by the maps and photographs are, at times, not accurate because the data are old or have not been verified by the agencies that prepared the maps and photographs. As noted above, many National Wetlands Inventory maps were prepared based on aerial photography from the 1980s. In addition, because of the large scale of the maps, they do not always accurately capture all wetlands, particularly wetland types that are difficult to detect from aerial photographs, such as small forested wetlands. Further, in some instances the maps and photographs do not provide clear evidence of whether a water or wetland is jurisdictional. In such cases, project

[21]While we were able to determine when consultant data were submitted for these projects, we were unable to determine the extent to which project managers used these data in making their determinations.

managers told us that site visits are the best data source for making a determination. This is particularly common for projects located near a roadway or an area that has been extensively developed. Similarly, features such as culverts and low-lying areas that would often serve to connect an otherwise isolated water to a jurisdictional water are not always visible in topographic maps, and aerial photographs and a site visit may be the only means of determining whether such connections do in fact exist.

Other factors that influence whether a site visit is conducted, according to Corps project managers, include

- the proximity of the project site to the Corps' office and resources available to travel to the site,
- the nature of the topography and the number of waters or wetlands that appear to be on the project site,
- a project manager's familiarity with the geographic area where the project is being undertaken,
- the potential for public concern over the proposed project,
- the size of the waters or wetlands on the project site and their value,
- the extent to which the data from all of the different data sources independently confirm the existence and nature of waters or wetlands on a project site as well as whether they are connected to "waters of the United States," and
- the existence of any other federal, state, or local agency that may have oversight responsibility for waters or wetlands at the project site and whether officials from those agencies visited the site.

In our review of project files, we found that project managers conducted site visits for 412 of the 770 projects whose files we reviewed. However, the extent to which site visits were conducted varied considerably by district, from a low of 34 percent of the St. Paul District's projects (53 of 158 files) to a high of 84 percent of the Chicago District's projects (124 of 148 files). This variability can be attributed, in part, to the size of the districts—the St. Paul District covers a broad area encompassing two states whereas the Chicago District covers only six counties in one state.

Corps Districts Generally Do Not Document Their Rationales for Nonjurisdictional Determinations

Corps records provide limited information on the rationale that the project managers used when deciding not to assert jurisdiction over certain waters and wetlands. In August 2004, the Corps required that project managers include a standardized form in each of the project files. The form provides basic information about the project site and requires project mangers to provide rationales for their decisions to assert jurisdiction; however, rationales are not required for their nonjurisdictional determinations because it is assumed that this information would be included elsewhere in the project files. Corps appeals review officers and the Chief of the Regulatory Branch said that all files should contain rationales that are site-specific and provide the reasoning and evidence used to make the determination. However, the majority of the files we reviewed contained either rationales that provided little site-specific information about why the project managers made nonjurisdictional determinations or no explanations whatsoever.

In August 2004, to improve the consistency, predictability, and openness of jurisdictional determination reporting practices**,** the Corps required that files contain a standardized form that is to include basic information about the project site, such as the location and size of the project. The form is also to be used by project managers to clearly indicate what data were used in making a determination and the bases for the determination—that is, the specific federal regulations that allowed the Corps to assert or precluded it from asserting jurisdiction. While the form requires that project managers include a rationale for asserting jurisdiction over waters on a project site, the form does not require that a rationale be included for a nonjurisdictional determination. According to the headquarters senior regulatory program manager responsible for overseeing jurisdictional determinations, the August 2004 form does not require that project managers include a rationale for their nonjurisdictional determinations because it was assumed that more detailed information would be included elsewhere in the project file.

Corps appeals review officers we contacted said it is important for Corps files to contain the information specified on the August 2004 form. However, these officials told us it is important that all files, including nonjurisdictional determination files, contain detailed, site-specific rationales that provide the reasoning and evidence used to conclude whether the waters or wetlands were within federal jurisdiction in the event an appeal was filed, the project manager changed, or the Corps received a public inquiry. Corps appeals review officers said that a

rationale should consist of (1) a detailed, site-specific commentary on how the on-site water does or does not connect with "waters of the United States"; (2) a description of what the data reviewed indicate; (3) a summary of the relevant hydrological conditions at the site; (4) a reference to any district-specific policy on asserting jurisdiction over waters that are considered adjacent to "waters of the United States" or navigable; and (5) a reason why the Corps concluded that the water is or is not jurisdictional.

The Chief of the Regulatory Branch echoed the position of the appeals review officers. He told us it is important that the file support the Corps' decision, particularly given public concern about the effect that *SWANCC* may have had on isolated, intrastate, nonnavigable waters. For example, since *SWANCC*, the Corps has received Freedom of Information Act requests from several environmental groups seeking information on nonjurisdictional determinations made by each of the Corps' districts. The Chief of the Branch stated that the Corps must be able to respond quickly to such public inquiries and its decisions must be transparent and fully supported if the agency expects the public to have confidence in its regulatory decisions.

However, we found that not all project managers are including a detailed rationale in the project files. Of the 770 nonjurisdictional determination files we reviewed, only 53 included a detailed rationale in the file. This ranged from a low of 4 percent of the Omaha District's files (11 of 257) to a high of 31 percent of the Galveston District's files (20 of 65). The examples in figure 7 illustrate site-specific rationales that explain how and why the Corps determined that it did not have jurisdiction.

Figure 7: Examples of Detailed Rationales Used by Two Corps Districts

Omaha District	Galveston District
In March and May 2004, the Omaha District conducted site visits as part of its jurisdictional determination for Twomile Canyon Creek in Boulder County, Colorado, at the request of the local water district and a resident. The project entailed constructing a dam to impound water in a tributary of the creek for municipal use. The file contained the project manager's notes that indicate the topographic map reviewed showed that Twomile Canyon Creek terminated at Silver Lake Ditch–a point at which there was a shut-off gate inlet that prevented the ditch from normally accepting any creek flow. According to the project manager's notes, while drainage continued on past the ditch, it was carried by two underground pipes totaling approximately 500 feet in length before being emptied into another ditch, which was jurisdictional. However, the project manager's notes state that the topographic map indicated that the creek did not continue past the ditch and because there was no surface connection, the creek was not jurisdictional.	In July 2004, the Galveston District received a jurisdictional request from a real estate corporation on behalf of the owner of a 5-1/2 acre property in Montgomery County, Texas. An environmental services company had surveyed the property and identified about 1-1/2 acres of wetlands on the project site. The file contained the project manager's notes summarizing the results of a site visit to the property, which indicate that it was obvious that a cypress wetland existed along the eastern property line. According to the project manager's notes, he walked the entire property to determine if the cypress wetland had a hydrological connection to another waterway. His notes indicate that he encountered a man-made ditch along the west side of the property that appeared to have been built in the past in an attempt to drain the wetland. However, he noted that the ditch is located at a higher elevation than the cypress wetland and that it extended to the north through uplands and terminates at a commercial property. The file indicated that the project manager found no evidence that the ditch provided either drainage or a hydrological connection to another waterway. The project manager also noted that the southern portion of the wetland dead-ends at another commercial property and speculated that it had probably been previously filled during its construction. In addition, the project manager's notes stated that no field evidence could be found that would connect the wetland to another waterway and, according to the flood insurance map, the tract is not located in the 100-year floodplain of the San Jacinto River.

Source: GAO analysis of Corps files.

Unlike the examples in figure 7, most of the files—526—included only partial rationales that provide little in-depth, site-specific information that the project manager relied upon to conclude that the water is isolated. This ranged from a low of 46 percent of the Chicago District's files (69 of 150) to a high of 83 percent of the Jacksonville District's files (116 of 140). Figure 8 provides two examples of partial rationales.

Figure 8: Examples of Partial Rationales Used by Two Corps Districts

Omaha District	St. Paul District
In July 2004, the Omaha District received a request for jurisdictional determination for a 99-acre property in Boulder County, Colorado. The applicant's consultant identified two wetlands, a stream, and a pond on the property. The project manager noted in the file that these waters flow into a municipal storm-water sewer system and thus the wetland is neither adjacent to nor surface connected to an interstate water.	In November 2004, the St. Paul District received a jurisdictional determination request for a 20-acre property in Kenosha County, Wisconsin. The consultant's delineation report identified one 0.9-acre wetland. In the file, the project manager noted that the consultant indicated that there were no surface-water connections between the wetland and a nearby creek, and that the only potential connection could be provided by a failing agricultural drainage system underlying the property. The project manager noted in the file that a review of the available maps and air photos confirms that the subject wetland is not connected or adjacent to a water of the United States. In addition, an interstate commerce connection could not be established. Therefore, the 0.9-acre wetland is isolated and not subject to Corps jurisdiction.

Source: GAO analysis of Corps files.

Many of the files we reviewed—191—did not contain any rationale to support the conclusion that the waters or wetlands under review were isolated. The percentage of files that contained no rationale also varied by district and ranged from a low of 12 percent of the Jacksonville District's files (17 of 140) to a high of 49 percent of the Chicago District's files (74 of 150). Two examples of files with no rationale that we reviewed are presented in figure 9.

Figure 9: Examples of No Rationales Used by Two Corps Districts

Chicago District	Omaha District
In June 2004, the Chicago District received a jurisdictional request for a 1-acre property in DuPage County. According to the developer's consultant, the property contained a three-quarter-acre wetland and two drainage ways. The project manager simply noted in the file that the wetland and drainage ways do not have a surface water connection to a jurisdictional water of the United States.	In October 2004, the Omaha District received a request for a jurisdictional determination for a 58-acre property located in Johnson County, Wyoming, that contained 23 reservoirs, of which 4 were determined to be nonjurisdictional. The project manager simply noted in the file that the reservoirs were isolated and did not support any form of interstate commerce except as potential habitat for migratory birds.

Source: GAO analysis of Corps files.

Although we did not assess the accuracy of the determinations made by the Corps in these cases, we are concerned that a lack of a detailed rationale

limits the transparency of the Corps' decision-making process and inhibits its ability to quickly respond to public inquiries and related challenges.

The Corps Generally Allocates Resources for Making Jurisdictional Determinations as Part of the Permitting Process

The Corps does not separately allocate resources for jurisdictional determinations but instead includes these resources in the total available for issuing permits. Corps headquarters allocates resources to its eight divisions based primarily on the level they have received in prior years, and these divisions, in turn, allocate resources to the 38 districts on the same basis. The districts then allocate resources to carry out the regulatory program based on guidance issued in 1999. However, this guidance does not provide a separate program activity for jurisdictional determinations. Instead, the guidance directs the districts to allocate 60 percent to 80 percent of their resources to evaluating permits and 10 percent to 25 percent to ensuring that project proponents are in compliance with permit requirements. According to the Corps, about 80 percent of Corps resources are allocated to permitting, about 15 percent are allocated to enforcement and compliance, and about 5 percent are allocated to other activities.[22] In four of the five districts we visited, staff responsible for evaluating permits perform jurisdictional determinations, while in the remaining district—Galveston—jurisdictional determinations are the responsibility of the compliance staff.

District officials stated they do not know how much time is spent conducting jurisdictional determinations but that over the past several years their workloads have increased because of several factors, including *SWANCC*, while their budgets have not kept pace.[23] As a result, they said their ability to effectively perform regulatory program activities, including making jurisdictional determinations, has been impacted, as can be seen in the following examples.

- Omaha District officials said that because of budget constraints and heavy workloads, the district is unable to visit most project sites in evaluating permits and making jurisdictional determinations. The

[22]The Corps is in the process of revising this guidance that could affect the allocation of resources committed to each of the regulatory program's activities.

[23]While additional funding has been requested, these funds have not been appropriated. For example, in fiscal year 2005, the regulatory program requested $150 million but received only $144 million.

district is responsible for six states, and while it has an office in each of the states, site visits can frequently entail significant travel costs. While project managers can occasionally obtain district approval to visit project sites, because of funding constraints they will do so only for large projects that potentially affect valuable water resources. Although district officials told us that site visits are not always necessary, they stressed that site visits may be the best way to determine if the water or wetland is jurisdictional because the maps and other data that project managers review in the office may not clearly indicate whether connections to other waters exist.

- In the Galveston District, officials told us that, in the past, their project managers' workload averaged about 60 regulatory projects at any given time, but this workload is now significantly more. One project manager estimated that his workload is about four times greater than it should be. As a result, project managers are unable to make as many site visits as they have in the past. While Galveston District officials agreed with Omaha District officials that site visits are not always necessary, they pointed out that nonjurisdictional determinations can be difficult to make and that site visits may be needed to verify that the waters or wetlands at a project site are isolated. According to the Corps Regulatory Branch Chief, the Corps' workload has also increased because the complexity of each project has increased, and, as a result, more projects require that the Corps consult with other agencies, such as the Department of the Interior's Fish and Wildlife Service, because of concerns about threatened or endangered species that may inhabit the project sites.

In January 2003, the Inspector General also reported resource constraints as an issue affecting the Corps' ability to effectively manage permit workloads.[24] Resource constraints, according to the Regulatory Branch Chief, are having an even greater impact on the program because of the lack of reliable information on the number of regulatory activities that are accomplished and the amount of resources that are needed to accomplish those activities. To obtain better information, in 2004, the Corps initiated a Workload Indicator Project. This project is intended to address two issues: (1) the agencywide imbalance between resources and workload and (2) district-level imbalances between resources and workloads. The project is

[24]U.S. Army Corps of Engineers, Office of the Engineer Inspector General, *Inspection of the Regulatory Program* (Washington, D.C.; January 2003).

also intended to link resources to measurable performance goals. As part of the project, in October 2004, Corps headquarters asked the districts to provide estimates on how much time is needed to complete 21 regulatory program tasks, such as making jurisdictional determinations, along with 103 associated subtasks, such as conducting a site visit as part of making a jurisdictional determination.

According to the Chief of the Regulatory Branch, the estimates that the districts provided varied widely and will need to be refined over time. For example, some of these differences reflected the different nature of work required in some districts. In one district with many threatened and endangered species, the district estimated that it needed substantially more resources to evaluate permits because of the increased staff and time required to address environmental concerns. Other districts, such as those that cover wide geographic areas, estimated that they needed more resources to conduct site visits because of the additional time and travel costs to conduct them. However, this official said that some differences may reflect inaccurate estimates of the time required to complete some of the tasks or subtasks because districts have never had to break down their workload in such detail. Despite the preliminary nature of the estimates, the Corps used them in fiscal year 2005 to allocate a 1 percent across-the-board regulatory program funding level increase to the districts. Based on the results of the Workload Indicator Project, eight districts were each allocated an additional $120,000 to, among other things, address their workload and performance. According to the Chief of the Regulatory Branch, the Workload Indicator Project estimates will be refined over time as the agency gains more experience using them, and it is believed that this effort will go a long way in supporting future budget requests.

We identified several additional challenges that the Corps will face as it incorporates the workload indicator estimates when developing budget proposals and allocating resources to the districts. First, the Corps' data management systems cannot yet provide accurate and complete information on the number of regulatory actions, including jurisdictional determinations, completed by each district. The Corps is currently phasing in a new data management system that, according to agency officials, should be able to provide the required information, although it will not provide 100 percent of the data the agency believes necessary to make management decisions. According to the Chief of the Regulatory Branch, this system is expected to be fully operational by the end of fiscal year 2006 if the Corps receives the funding needed to correct user accessibility and data integration problems and fully implement it. The Corps is also

exploring options for obtaining the additional data it may need to bridge the gap between the data management system and its proposed process for allocating resources. Second, the Corps will need time to make the transition from its current allocation method—based on historic allocations—to a method that is performance-based and reflects districts' actual workloads. According to the Chief of the Regulatory Branch, a performance-based allocation process could result in shifting resources among districts. As noted above, the Corps allocates resources to its eight divisions based primarily on the levels they have received in prior years. According to the Corps, the divisions are then responsible for managing their resources and workloads from a regional perspective. According to Corps headquarters senior regulatory program managers, the divisions will be expected to reallocate resources among the districts to better meet individual district workloads and performance levels—such as, for example, issuing permits within specified time frames. Such resource reallocations could be accomplished by temporarily assigning project managers to districts that are experiencing larger workloads or poorer performance levels, or by having districts send permit applications to other districts for evaluation.

The Corps Is Generally Not Using 33 C.F.R. § 328.3(a)(3) to Assert Jurisdiction

The Corps is generally not using 33 C.F.R. § 328.3(a)(3) as the sole basis to assert jurisdiction over isolated, intrastate, nonnavigable waters. In February 2004, we reported that between January 2003 and January 2004, the districts sought formal project-specific headquarters approval a total of eight times before attempting to assert jurisdiction over isolated, intrastate, nonnavigable waters based solely on 33 C.F.R. § 328.3(a)(3). According to EPA officials, in three of the cases, the agencies ultimately determined that the waters in question were "waters of the United States" based on factors other than those identified in that regulatory provision. In two cases, the Corps and EPA determined that the waters in question were not jurisdictional; and, in another case, the district withdrew its request for headquarters approval. Two of the cases have yet to be resolved, even after 1-1/2 years, according to the senior regulatory program manager who is the focal point for coordinating such cases.

This official told us that no additional requests to use this section of the regulations as the sole basis to assert jurisdiction have been submitted to headquarters since January 2004. Corps district officials told us they generally do not consider seeking jurisdiction over any isolated, intrastate, nonnavigable waters on the sole basis of 33 C.F.R. § 328.3(a)(3) primarily because (1) headquarters has not provided detailed guidance on when it is

appropriate to use this provision; (2) district offices believe that headquarters does not want them to assert jurisdiction over these waters or wetlands; (3) district offices are concerned about the amount of time that might be required for a decision from headquarters; or (4) few isolated, intrastate, nonnavigable waters were in their districts whose use, degradation, or destruction could affect interstate commerce. Because of concern about using 33 C.F.R. § 328.3(a)(3), Corps officials in the St. Paul, Omaha, and Jacksonville districts told us that they limit asserting jurisdiction over isolated and intrastate waters only when public boat ramps are present to provide access to these waters.

The senior regulatory program manager acknowledged that the lack of guidance and the lengthy time frames for receiving headquarters approval may have caused some districts to be reluctant to use 33 C.F.R. § 328.3(a)(3) as the sole basis for asserting jurisdiction. To clarify the process for seeking guidance and to establish time frames for obtaining headquarters approval, in January 2005, the Corps drafted a memorandum of agreement that (1) identifies a process for the Corps and EPA to follow when consulting on such requests, including procedures to follow when the agencies disagree; (2) lists the types of documentation that districts are to submit along with their referrals; and (3) establishes time frames for responding to the districts. This draft memorandum was shared with EPA in March 2005. As of July 2005, the two agencies agree that it would be helpful to develop additional guidance for the districts that would provide a clear understanding for using this section of the regulations. However, the agencies have yet to resolve differences regarding the content of the memorandum. This is delaying finalizing the memorandum, and, while discussions are continuing, the agencies have set no time frame for resolving these differences.

Agencies Are Not Collecting Data to Fully Assess the Impact of *SWANCC*

Neither the Corps nor EPA is collecting data to fully assess the impact of *SWANCC* on waters and wetlands that no longer fall under federal jurisdiction. The Corps began collecting data in April 2004, at EPA's request, in an effort to respond to congressional, project proponent, and public concerns about how field offices are applying the *SWANCC* ruling. However, the data being collected are limited and of questionable value for use in assessing the impact of *SWANCC* on aquatic resources. The agencies would like to collect better data, but these data are either not available or would be difficult to obtain. According to Corps and EPA officials, limited resources prevent them from collecting the additional data and conducting

an in-depth analysis that would be required to fully assess the impact of *SWANCC*.

Data Being Collected Is Inadequate to Fully Assess the Impact of *SWANCC*

Neither the Corps nor EPA is collecting data that would allow a full assessment of the impact of the *SWANCC* ruling on isolated, intrastate, nonnavigable waters. In January 2003, EPA and the Corps requested that the public provide them with information, data, and comments on, among other things, the amount of wetland acreage potentially affected by the *SWANCC* ruling, as well as the function and values of wetlands and other waters that might be affected by the *SWANCC* ruling.[25] The Corps and EPA received about 130,000 comments, including those from states that estimated that many of the intrastate, nonnavigable waters in their states would be considered isolated as a result of the ruling. For example, Wisconsin estimated that of its 5.3 million acres of wetlands, about 1.1 million would no longer fall under federal jurisdiction. Texas estimated that because only about 21 percent of its 80,000 miles of rivers and streams were perennial, approximately 79 percent would not be considered navigable and thus subject to federal regulation. Similarly, Texas estimated that some of its 304,000 acres of inland lakes and reservoirs would no longer be subject to federal regulation.[26]

To obtain information to respond to congressional, project proponent, and public concerns about how field offices are applying the *SWANCC* ruling, in October 2003, the Corps agreed to an EPA request to document all nonjurisdictional determinations. Specifically, beginning in April 2004, the Corps agreed to have district offices fill out a form for each project where the project managers make a nonjurisdictional determination and report these on a quarterly basis for 1 year. In requesting this information, EPA stated that it would, among other things, (1) better enable an assessment of the extent and nature of resources impacted by *SWANCC*, (2) help foster consistent and sound decision-making, and (3) help identify issues that might benefit from increased headquarters attention or guidance. These nonjurisdictional determination forms are being posted on each district's Web site. According to a senior regulatory program manager, even though the initial 1-year period has elapsed, for the near future the Corps is

[25]68 *Fed. Reg.* 1991 (Jan. 15, 2003).

[26]These estimates were provided to EPA and the Corps in response to the agencies' January 2003, request for data.

continuing to fill out the form to collect the data. The data being collected include

- the estimated size of the isolated water or wetland;
- the approximate size of the project site and its latitude and longitude;
- the name of the waterway where the project site is located;
- the type of water, such as prairie pothole, playa lake, vernal pool, or wetland;
- whether the water or wetland might be used as habitat for birds protected by migratory bird treaties or other migratory birds that cross state lines;
- whether the water would be used as habitat for endangered species; and
- if the water or wetland is used to irrigate crops sold in interstate commerce.

However, the data being collected by the Corps and EPA is inadequate to fully assess the impact of *SWANCC* on isolated, intrastate, nonnavigable waters. Specifically, the data being collected do not reflect the actual size of the nonjurisdictional water or wetland or the amount of the water or wetland that may be impacted by the project. The data collection form directs the project managers to categorize the size of the wetland found to be nonjurisdictional as being less than 1 acre, 1 to 3 acres, 3 to 5 acres, 5 to 10 acres, 10 to 25 acres, 25 to 50 acres, or greater than 50 acres. Moreover we noted differences in the way that project managers are recording the acreage. For example, some project managers are including specific information on the number and actual size of the wetlands, while others are merely placing checkmarks in one of the categories. Additionally, some project managers are classifying almost all of the nonjurisdictional waters as wetlands even though they may not meet the Corps' definition of a wetland, thereby obscuring impacts of *SWANCC* to both wetland and nonwetland waters. Further, the form asks only for the general size of the waters or wetlands found to be nonjurisdictional, and not what portion of the waters or wetlands on the site will be degraded or destroyed by the development. According to project managers, they may not have specific information on the project planned by the project proponent at the time of the jurisdictional determination and, as a result, may be unable to

determine how the project will affect the waters or wetlands on the site. Further, if none of the waters or wetlands on a project site are jurisdictional, a permit is not required under the Clean Water Act, and thus, project managers may have little information, if any, about specific plans for any eventual development on the site.

The data being collected on the form also may not provide reliable or sufficient information on the functional value of the waters. While the form requires that project managers indicate whether the water is or could be used as habitat by migratory birds or endangered species, the form may not be capturing reliable information because the project managers may not always know this information. One project manager said he has no expertise on the birds that are protected by migratory bird treaties or which species might be endangered; as a result, he was unsure how to fill out the form. According to another project manager, the staff was discouraged from indicating whether the water could be used as habitat by birds or other species unless they had proof that it was actually used in this manner. As a result, the data collected by the Corps may not accurately reflect the number of instances where the Corps has determined that waters and wetlands are nonjurisdictional but they may be, or are used as, among other things, habitat by migratory birds.

According to Corps and EPA officials, while they have analyzed some of the data collected, to date, limited resources prevent them from conducting a more in-depth analysis of the data to assess the impact of *SWANCC* on aquatic resources. Because of limited resources, according to a senior regulatory program manager and EPA officials, neither agency is planning to conduct a more in-depth analysis of data already collected. Even though the 1-year data collection period has expired, the Corps is still using the form to collect data for the near term. The Corps is, however, re-examining its data collection effort by, for example, revising the form, in coordination with EPA, to both shorten it and capture more relevant data. According to the senior regulatory program manager working on this effort, one of the issues needing to be resolved is what data are most relevant. Both EPA and Corps officials recognize that the data being collected has its limitations, but they stated they did not want any data collection effort to be overly burdensome on project managers, given the limited resources available to collect and record the data. In addition, a Corps senior regulatory program manager said the agency has no mandated authority to further collect and analyze the data for nonjurisdictional determinations once that determination has been made. Further, doing so only detracts from its primary mission of evaluating permits.

Additional Data Needed to Assess the Impact of *SWANCC* Is Not Readily Available

The type of data that would need to be collected to fully assess the impact of *SWANCC* on aquatic resources are either not readily available or would take extensive resource investments that neither EPA nor the Corps has. For example, data are needed on waters or wetlands that are impacted without notification to either the Corps or EPA. According to officials from both agencies, since *SWANCC*, project proponents do not always contact the Corps for a jurisdictional determination. Instead, they proceed with site development without any notification. Currently, neither the Corps nor EPA has a means to determine the extent to which this occurs.

For those project proponents who do notify the Corps, data challenges remain extensive. According to several project managers, the Corps would need to collect data on the exact acreage of the water determined to be isolated, but collecting this information may be problematic if the project proponent does not provide it because the Corps lacks resources to measure waters over which it has no jurisdiction. Other project managers said that data would need to be collected on the extent to which the waters, even though they may not have a surface-water connection to other waters, are nearby other waters—all of which may have an underground water connection. Data are also necessary on the nature of the functional value these water systems provide. Several other project managers indicated that data would be needed on the extent and nature of waters that were considered jurisdictional prior to *SWANCC* to provide a baseline to measure the impact of *SWANCC*. However, project managers said these types of data are either not readily obtainable or available. Project managers' concerns about the need for additional data were also echoed in a journal of the Society of Wetland Scientists. In a series of articles on *SWANCC*, the society identified information gaps and areas for future research that could help assess the impact of *SWANCC*.[27] These include the lack of (1) a consistent definition of an isolated wetland; (2) knowledge of the number and area of isolated wetlands in the United States; (3) information on the diversity of isolated wetlands relative to each other and to other ecosystems; (4) knowledge about other federal, state, tribal, and local programs that may protect isolated wetlands; and (5) information on how isolated wetlands, wetland complexes, and other at-risk waters contribute, hydrologically, chemically, and biologically to "waters of the United States."

[27]"Isolated wetlands: state-of-the-science and future directions," *Wetlands*, vol. 23, no. 3 (September 2003). The society was formed to promote the exchange of scientific information related to wetlands and operates as a charitable and educational organization.

Neither agency believes that it is possible to easily develop and readily implement a realistic approach that would allow them to fully assess the impact of the ruling on federal jurisdiction under the Clean Water Act, given the lack of some data, the vast amount of data that would be needed to assess the impact of *SWANCC*, and current resource constraints. However, according to EPA officials, even though the agencies may not be able to conduct a thorough assessment of the impacts of *SWANCC* on the nation's aquatic resources, it is important to collect data on the number and nature of the Corps' nonjurisdictional determinations and make this data publicly available to increase the transparency and predictability of nonjurisdictional decisions. However, the data collected should not, according to some project managers, mislead the public into erroneously concluding what impact *SWANCC* has had on isolated, intrastate, nonnavigable waters.

Conclusions

In the aftermath of *SWANCC*, the Corps has taken some positive steps to increase the consistency, predictability, and openness of its jurisdictional determinations. However, although the Corps now requires its project managers to include rationales in their files that explain how and why the decision that certain waters or wetlands fall within federal jurisdiction was made, it does not require similar rationales for nonjurisdictional determinations. As stated by Corps appeals review officers and the Chief of the Regulatory Branch, the Corps should require detailed rationales for all jurisdictional determinations and not just those where it is asserting jurisdiction. Without this information in the file, the Corps will not be able to easily replicate its decisions, limiting its ability to quickly respond to an appeal or public inquiry. Furthermore, the lack of guidance from headquarters and the lengthy time frames that may be involved in receiving a decision from headquarters have discouraged Corps districts from asserting jurisdiction using the provisions under 33 C.F.R. § 328.3(a)(3). Since January 2001, the Corps and EPA have not been able to agree on the procedures the districts should follow when requesting the use of this provision to assert jurisdiction and have been unable to develop a process for the Corps and EPA to follow when consulting on such requests. Until the agencies finalize these procedures, Corps districts will have little incentive to use 33 C.F.R. § 328.3(a)(3) as a basis for asserting jurisdiction over certain waters and wetlands that may, in fact, be subject to Clean Water Act requirements.

Recommendations for Executive Action

To provide greater transparency in the Corps' processes for making nonjurisdictional determinations, we are recommending that the Secretary of the Army require the Corps to include in its project files explanations for nonjurisdictional determinations, as it does for jurisdictional determinations, and that these explanations be detailed and site-specific.

To help provide greater clarity to the districts when using 33 C.F.R. § 328.3(a)(3) as the sole basis for asserting jurisdiction, we are also recommending that the Secretary of the Army, through the Corps, and the Administrator of EPA complete the process of jointly developing procedures that, at a minimum, include guidance for the type of information that districts should submit to headquarters, actions each agency is responsible for taking, time frames for each agency to complete their reviews, and provisions for resolving any interagency disagreement.

Agency Comments and Our Evaluation

We provided a draft of this report to the Secretary of the Department of Defense and the Administrator of EPA for review and comment. Both the Department of Defense and EPA concurred with the report's findings and recommendations. In its comments, the Department of Defense stated that it is working with EPA to further streamline reporting requirements and improve documentation required to support all determinations. The department also pointed out that negotiations are ongoing to develop procedures for field staff to use when relying on 33 C.F.R. § 328.3(a)(3) as the sole basis for asserting jurisdiction. In its written comments, EPA pointed out that the Corps' practice of collecting and posting nonjurisdictional determination information on the districts' Web sites has been a part of the two agencies' goal to increase transparency, predictability, and consistency of the regulatory program. EPA also noted that an important step in achieving this goal is for Corps districts and EPA regional offices to work closely together on cases involving geographically isolated waters. EPA commented that the process for doing so should allow the agencies to ensure more consistent application of the regulations, while taking into account all relevant information about a particular body of water. Both the Department of Defense and EPA provided technical comments and clarifications which we incorporated, as appropriate. The Department of Defense's and EPA's written comments are presented in appendixes III and IV, respectively.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to interested congressional committees and Members of Congress; the Secretary of Defense; the Administrator, EPA; and the Chief of Engineers and Commander, U.S. Army Corps of Engineers. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or mittala@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix V.

Sincerely yours,

Anu K. Mittal
Director, Natural Resources
and Environment

Scope and Methodology

To identify the processes and data the U.S. Army Corps of Engineers (the Corps) uses to make jurisdictional determinations, we reviewed federal regulations and the Corps' related guidance. We also interviewed Corps officials in headquarters and 5 of the Corps' 38 districts—Chicago; Galveston, Texas; Jacksonville, Florida; Omaha, Nebraska; and St. Paul. We selected 4 of the 5 districts because they made more nonjurisdictional determinations between April and December 2004 than any of the other 38 districts. We selected the fifth district—Galveston—because it also accounted for a large number of nonjurisdictional determinations and was located in a geographic region different than the other four districts. Altogether, these five districts accounted for 58 percent of the nonjurisdictional determinations the Corps made between April and December 2004. This time period was selected because data on the Corps' nonjurisdictional determinations were not readily available before April 2004.

To determine the extent to which the Corps documents its decisions when it concludes that it does not have jurisdiction over certain waters and wetlands, we reviewed 770 project files in the five selected districts where the agency determined, between April and December 2004, that it did not have jurisdiction over some or all of the waters on those project sites. Specifically, we reviewed 150 files in the Chicago District, 65 in the Galveston District, 140 in the Jacksonville District, 257 in the Omaha District, and 158 in the St. Paul District. We used a data collection instrument to record specific data for each of the files, such as whether a site visit was conducted, a consultant was used by the project proponent, the project manager indicated what data were reviewed in the course of making a determination, and the different types of data that were included in the file. We also interviewed appeals review officers who review project files in the five districts to determine what documentation they believe is necessary to include in project files. We obtained this information from the appeals review officers because, until promulgating a standardized form in August 2004, the Corps had no guidance on what information on jurisdictional determinations should be contained in project files. Further, the Corps has no guidance on what a rationale should include. In addition, we contacted the appeals review officers because they are the agency's internal quality assurance check to ensure that the Corps' administrative records fully support jurisdictional determinations. We used the appeals review officers' views on what information should be included in project files, including what constitutes a detailed rationale, as criteria in reviewing the files and categorizing each of the 770 files as having no rationale, a partial rationale, or a detailed rationale. To ensure that our initial file

reviews were accurate, we randomly selected a minimum of 10 percent of the files and independently reviewed them a second time by comparing the information recorded in the data collection instrument to the original file to ensure that the information entered into the data collection instrument was accurate and that our assessment of the project manager's rationale was reasonable. In reviewing the project files and analyzing project managers' rationales, we did not evaluate whether project managers' determinations were correct. We also did not evaluate whether the information available to the project managers in making their jurisdictional determinations was sufficient.

To identify the process the Corps uses to allocate resources for making jurisdictional determinations, we reviewed its standard operating procedures and related guidance for carrying out the Corps' section 404 regulatory program. We also interviewed Corps officials who are responsible, in headquarters and each of the five selected districts, for preparing resource estimates for carrying out the program. In addition, we obtained data on the number of resources allocated to the Corps and each of the districts as well as workload data, including the number of determinations made by the districts, for fiscal years 2002 and 2003. Finally, to obtain a broad overview of the program, we obtained historical program statistics for fiscal years 1997 through 2004.

To determine the extent to which the Corps is asserting jurisdiction over isolated, intrastate, nonnavigable waters using its remaining authority in 33 C.F.R. § 328.3(a)(3), we interviewed Corps and Environmental Protection Agency (EPA) officials in headquarters to identify the number and nature of cases that have been submitted to headquarters between January 2003 and July 2005 for approval. We also interviewed district officials to determine the circumstances under which they would ask to assert jurisdiction using these Corps regulations and whether they had sought formal project-specific headquarters approval prior to using them.

To determine the extent to which the Corps and EPA are collecting data to assess the impact of *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (*SWANCC*), we interviewed Corps and EPA officials at their respective headquarters to identify what actions have been taken or are planned to assess the impact. We also obtained and reviewed forms being used to collect data on nonjurisdictional determinations made since April 2004. In addition, we interviewed Corps project managers to determine their views on the impact of *SWANCC*, whether data being

collected were sufficient to assess the impact of *SWANCC*, and what data should be analyzed to assess the impact.

We conducted our work from June 2004 through July 2005 in accordance with generally accepted government auditing standards.

Data Contained in Corps Files on Nonjurisdictional Determinations in Five District Offices

This appendix provides detailed information on the results of our review of 770 files in five Corps district offices—Chicago; Galveston, Texas; Jacksonville, Florida; Omaha, Nebraska; and St. Paul. Table 1 summarizes the number of nonjurisdictional determination files we reviewed in the five districts.

Table 1: Nonjurisdictional Determination Files Reviewed in Five Corps Districts

Corps district	Number of files reviewed
Chicago	150
Galveston	65
Jacksonville	140
Omaha	257
St. Paul	158
Total	**770**

Source: GAO analysis of Corps project files.

Tables 2 through 6 summarize the types of data we found in the files we reviewed in the five districts.

Table 2: Project Files That Contained Topographic Maps, by District

	Files that contained topographic maps				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	119	79.3	31	20.7	**150**
Galveston	58	89.2	7	10.8	**65**
Jacksonville	89	63.6	51	36.4	**140**
Omaha	184	71.6	73	28.4	**257**
St. Paul	140	88.6	18	11.4	**158**

Source: GAO analysis of Corps project files.

Table 3: Project Files That Contained Soil Survey Maps, by District

	Files that contained soils survey maps				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	123	82.0	27	18.0	**150**
Galveston	39	60.0	26	40.0	**65**
Jacksonville	75	53.6	65	46.4	**140**
Omaha	43	16.7	214	83.3	**257**
St. Paul	124	78.5	34	21.5	**158**

Source: GAO analysis of Corps project files.

Table 4: Project Files That Contained Wetlands Inventory Maps, by District

	Files that contained wetlands inventory maps				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	135	90.0	15	10.0	**150**
Galveston	38	58.5	27	41.5	**65**
Jacksonville	15	10.7	125	89.3	**140**
Omaha	94	36.6	163	63.4	**257**
St. Paul	119	75.3	39	24.7	**158**

Source: GAO analysis of Corps project files.

Table 5: Project Files That Contained Aerial Photographs, by District

	Files that contained aerial photographs				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	137	91.3	13	8.7	**150**
Galveston	59	90.8	6	9.2	**65**
Jacksonville	119	85.0	21	15.0	**140**
Omaha	112	43.6	145	56.4	**257**
St. Paul	135	85.4	23	14.6	**158**

Source: GAO analysis of Corps project files.

Table 6: Project Files That Contained Ground Photographs, by District

	Files that contained ground photographs				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	95	63.3	55	36.7	**150**
Galveston	35	53.9	30	46.2	**65**
Jacksonville	36	25.7	104	74.3	**140**
Omaha	103	40.1	154	59.9	**257**
St. Paul	51	32.3	107	67.7	**158**

Source: GAO analysis of Corps project files.

Most of the project proponents relied on the use of consultants to prepare or help prepare their jurisdictional requests or permit applications. The Omaha District had the fewest number of requests or applications that were prepared, in part, by consultants. Table 7 summarizes the number of project proponents that relied on the use of consultants.

Table 7: Project Proponents That Relied on the Use of Consultants, by District

	Consultant used				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	140	93.3	10	6.7	**150**
Galveston	47	72.3	18	27.7	**65**
Jacksonville	131	93.6	9	6.4	**140**
Omaha	140	54.9	115	45.1	**255**[a]
St. Paul	113	71.5	45	28.5	**158**

Source: GAO analysis of Corps project files.

[a]We were unable to determine whether two project proponents relied on the use of consultants.

Project managers can conduct site visits in the course of making their jurisdictional determinations. The percentage of projects where site visits were conducted varied by district, with fewer site visits being conducted in St. Paul and Omaha. The St. Paul District encompasses two states, while the Omaha District has all or portions of six states. More site visits were conducted in the Chicago District, which covers a six-county area. The Jacksonville District also conducted site visits for the majority of its

determinations. Even though this district encompasses the entire state, it has 12 field offices located around the state to reduce the geographic distance to project sites. Table 8 summarizes the number of projects where project managers conducted a site visit in each of the districts we visited.

Table 8: Projects Where the Project Manager Conducted a Site Visit, by District

	Site visit conducted				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	124	83.8	24	16.2	**148**[a]
Galveston	30	46.2	35	53.8	**65**
Jacksonville	95	68.8	43	31.2	**138**[a]
Omaha	110	43.5	143	56.5	**253**[b]
St. Paul	53	33.5	105	66.5	**158**

Source: GAO analysis of Corps project files.

[a]We were unable to determine if site visits were conducted on two projects.

[b]We were unable to determine if site visits were conducted on four projects.

According to Corps appeals review officers, project files should clearly identify what data were used by project managers in the course of making their determinations, so that the data can be readily replicated if necessary. Even so, districts varied widely in the extent to which the project files contained this clear identification, as shown in table 9. Of all the districts, the Chicago District clearly identified the data used in almost all of the project files we reviewed.

Table 9: Files That Contained a Clear Identification of Data Used in Making the Determinations

	Amount of data clearly identified by the project manager						
	None		Some		All		
Corps district	Number	Percent	Number	Percent	Number	Percent	Total number
Chicago	0	0.0	4	2.7	146	97.3	**150**
Galveston	21	32.3	25	38.4	19	29.2	**65**
Jacksonville	40	28.6	55	39.3	45	32.1	**140**
Omaha	139	54.1	112	43.6	6	2.3	**257**
St. Paul	62	39.2	86	54.4	10	6.3	**158**

Source: GAO analysis of Corps project files.

According to Corps appeals review officers, project files should also contain a basis for asserting or not asserting jurisdiction over any water or wetland on the project site. A basis is the regulatory authority used for asserting jurisdiction, or the reason for not asserting jurisdiction. As shown in table 10, almost all of the files we reviewed contained the basis for the determinations.

Table 10: Files That Contained a Basis for the Determination in the Five Corps Districts

	Basis for determination				
	Yes		No		
Corps district	Number	Percent	Number	Percent	Total
Chicago	150	100	0	0.0	**150**
Galveston	63	96.9	2	3.1	**65**
Jacksonville	140	100	0	0.0	**140**
Omaha	247	96.1	10	3.9	**257**
St. Paul	147	93.0	11	7.0	**158**

Source: GAO analysis of Corps project files.

According to Corps appeals review officers, in addition to a clear identification of data used and a basis for the determination, project files should contain a detailed rationale for the determination. A detailed rationale is one that is site-specific, references data used and how that data led to the project manager's conclusion, and cites district policy with respect to district-specific practices for asserting jurisdiction over waters,

such as what conditions must be met for a water to be adjacent to a "water of the United States." Few files, however, contained a detailed rationale. The Galveston District had the largest percentage of project files that contained a detailed rationale. Table 11 summarizes the types of rationales included in the project files we reviewed in the five districts.

Table 11: Files That Contained No, a Partial, or a Detailed Rationale in the Five Corps Districts

	Type of rationale included by the project manager						
	None		Partial		Detailed		
Corps district	Number	Percent	Number	Percent	Number	Percent	Total number
Chicago	74	49.3	69	46.0	7	4.7	**150**
Galveston	11	16.9	34	52.3	20	30.8	**65**
Jacksonville	17	12.1	116	82.9	7	5.0	**140**
Omaha	67	26.1	179	69.6	11	4.3	**257**
St. Paul	22	13.9	128	81.0	8	5.1	**158**

Source: GAO analysis of Corps project files.

Comments from the Department of the Army

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

August 19, 2005

Ms. Anu Mittal
Director
Natural Resource and Environment
U.S. General Accountability Office
441 G Street, N.W.
Washington, D.C. 20548-1000

Dear Ms. Mittal:

This is our response to the Government Accountability Office (GAO) draft report, "WATERS AND WETLANDS: Corps of Engineers Needs to Better Support Its Decisions for Not Asserting Jurisdiction," dated September 2005, (GAO-05-870).

The GAO report was prepared to examine the: (1) process and data the Corps of Engineers (Corps) uses for making jurisdictional determinations; (2) extent to which the Corps documents decisions that it does not have jurisdiction; (3) extent to which the Corps is using its remaining authority to assert jurisdiction over certain isolated, intrastate, non-navigable waters; and (4) extent to which the Corps and the Environmental Protection Agency (EPA) are collecting data to assess the impact of the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (SWANCC). The report identifies that Corps project managers will use existing data sources to preliminarily assess jurisdiction. When the existing data cannot support a determination, the report notes that Corps project managers then will conduct a field visit to support a determination. In general, the report concludes that more documentation is provided and available in project files for determinations of jurisdiction as compared to determinations of no jurisdiction. In addition, the report indicates that the Corps is not asserting jurisdiction generally over isolated, intrastate, non-navigable waters using its remaining authorities, due to a lack of guidance from Army Corps of Engineers Headquarters (HQ) and perceptions that they should not be doing so. And finally, the report notes that limited information is being collected to comprehensively assess the impacts of SWANCC. As a consequence of this investigation, the GAO recommends that the Corps require district offices to include detailed rationales for non-jurisdictional determinations in their files and finalize with the EPA the additional guidance that will help the districts make certain jurisdictional determinations.

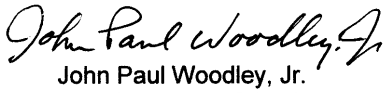
In April 2004, the Corps in concert with the EPA developed a reporting sheet to document determinations of no jurisdiction. Information included on the sheet includes basic information about the project site, onsite resource types and projected sizes, and basis for not asserting jurisdiction over the onsite resources. The objective of this reporting sheet was to develop procedures to improve the consistency, predictability,

and openness of jurisdictional determination reporting practices. By documenting determinations of no jurisdiction, as based on the sole use of the Migratory Bird Rule, we are establishing a baseline record for evaluations reviewed by the Corps field staff. It is important to note that this reporting sheet was not developed to comprehensively assess the aquatic resource impacts of SWANCC. Due to overall positive response from the public on the reporting sheet, the Corps, in August 2005 established a second reporting sheet to standardize documentation requirements for all determinations of jurisdiction. In addition, district offices were required to make these forms publicly available on their local regulatory web pages. Based on the data collected and gaps identified over the past year, we have engaged in discussions with the EPA to further streamline reporting requirements as well as improve documentation required to support a decision. Again, these final actions will be made available to the public.

On January 31, 2005, the Army, to further encourage district field staff to seek HQ-level review for determinations under 33 C.F.R. 328.3 (a)(3) provided the EPA with a draft Memorandum of Agreement (MOA) to establish a procedure for HQ-level review to determine whether a particular waterbody or wetland is subject to Clean Water Act (CWA) jurisdiction under 33 C.F.R. 328.3 (a)(3). The procedure outlined in the MOA provides a predictable and consistent approach for reviewing CWA jurisdiction over these waters in a timely manner and ensure the review process is open to the public. We will continue to work with EPA in developing an instrument to support the review process recommended in the January 15, 2003 Advance Notice of Proposed Rulemaking guidance.

The Assistant Secretary of the Army (Civil Works) and the Army Corps of Engineers generally concur with your findings regarding practices for determining and documenting CWA jurisdiction. With respect to the recommendations, we have had several discussions with the EPA to identify measures to streamline as well as improve reporting requirements for determinations of jurisdiction. Additional discussions have occurred with the EPA to develop procedures to support determinations under 33 C.F.R. 328.3(a)(3)(i)-(iii). In both cases, negotiations are ongoing. Our goal is to develop processes and reporting strategies to ensure the Corps achieves the highest level of consistency and predictability possible given inherently different characteristics of aquatic resources in different locations, while providing the public with the greatest opportunity for understanding the basis for jurisdictional determinations so that full compliance with the CWA is encouraged, with the goal of increasing the effectiveness, efficiency and responsiveness of the Army's regulatory program.

Very truly yours,



John Paul Woodley, Jr.
Assistant Secretary of the Army
(Civil Works)

Enclosure

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GAO DRAFT REPORT – DATED SEPTEMBER 2005
GAO-05-870

"WATERS AND WETLANDS: Corps of Engineers Needs to Better Support Its Decisions for Not Asserting Jurisdiction"

ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS) COMMENTS TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Corps require district offices to include detailed rationales for non-jurisdictional determinations in their files.

ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS): We concur with your recommendation. To support this recommendation, it is important to note that the Corps and the EPA have had several discussions to date on how to streamline the reporting process for determinations of jurisdiction. It is envisioned that the Jurisdictional Information Sheet and the Non-Jurisdictional Information Sheet will be combined to report all data on one reporting sheet. Additional revisions will occur to further support the decision-making process, based on data collected and gaps identified over the previous year. In addition, information obtained from the Corps comprehensive survey conducted to support the "WATERS AND WETLANDS: Corps of Engineers Needs To Evaluate its District Office Practices in Determining Jurisdiction," will be used to further clarify reporting requirements. Our goal is to develop a reporting strategy to ensure the Corps is achieving the highest level of consistency and predictability possible, while providing the public with the greatest opportunity for understanding the basis for jurisdictional determinations so that full compliance with the Clean Water Act is encouraged.

RECOMMENDATION 2: The GAO recommended that the Corps finalize with EPA the additional guidance that will help the districts make certain jurisdictional determinations under 33 C.F.R. 328.3(a)(3)(i)-(iii).

ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS): We concur with your recommendation, and we will continue to work with the EPA to finalize a procedure to support a HQ-level determination under 33 C.F.R. 328.3(a)(3)(i)-(iii). The guidance shall identify information to be submitted from the field to support a HQ-level review and outline HQ-level review procedures that establish processing requirements and timelines, with the goal of increasing the effectiveness, efficiency and responsiveness of the regulatory program.

Comments from the Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 15 2005

OFFICE OF
WATER

Ms. Ann K. Mittal
Director, Natural Resources and Environment
United States Government Accountability Office (GAO)
Washington, DC 20548

Dear Ms. Mittal:

Thank you for the opportunity to review and comment on the draft report entitled "Corps of Engineers Needs to Better Support Its Decisions for Not asserting Jurisdiction." The draft report focuses on implementation of the Clean Water Act (CWA) section 404 program, with particular focus on determinations of whether particular waters are subject to CWA jurisdiction after the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County (SWANCC)*. The Environmental Protection Agency (EPA) welcomes an opportunity to comment on the report, and to provide the broader CWA perspective for its discussion.

The CWA section 404 program requires permits for discharges of dredged or fill material into "waters of the US." The draft GAO report emphasizes the challenges faced by Corps of Engineers Districts since the *SWANCC* decision, which held that the CWA does not authorize protection of isolated, intrastate, non-navigable waters based solely on the presence of migratory birds. While the *SWANCC* decision did not create the programmatic and scientific challenges posed by jurisdictional determinations (e.g., what factors are relevant in determining whether a water is tributary), the decision did highlight areas of the existing regulations that had previously not been the focus of scrutiny.

The Corps of Engineers and EPA are committed to improving the transparency, predictability, and consistency of the CWA section 404 program. The agencies have taken a number of steps towards this goal.

One such step is the Corps District practice of collecting and posting on their websites information regarding determinations that a particular water is non-jurisdictional. The form used for non-jurisdictional postings calls for the precise location of the aquatic resource in question, name of regulatory project manager, whether field visits were conducted as part of the analysis, general information on the type and extent of aquatic resources, and an assessment of whether "Migratory Bird Rule" factors were potentially present at the site.

The draft GAO report criticizes the Corps no-jurisdiction form, concluding that it collects insufficient data to provide a comprehensive assessment, but instead focuses on the legal rationale that is the basis for the jurisdiction decision. EPA agrees that files should contain complete data to support the decision and the technical and legal basis for non-jurisdictional decisions. National use of a form and public posting on the internet helps the Corps, EPA, and the general public

better understand the basis and reasoning for District no-jurisdiction determinations. Prior to the Corps Districts' systematic use and posting of the no-jurisdiction form, findings of no-jurisdiction were dispersed throughout District Office files, often in hardcopy only, and effectively unavailable for broader analysis or ready public access. Development and continued use of the no-jurisdiction form has been an important part of the two agencies' efforts to increase transparency, predictability, and consistency of the section 404 program. EPA has analyzed the data and is using it in internal program management.

Another important step in those efforts is to work closely with field staff in Corps Districts and EPA Regional offices regarding jurisdictional calls involving geographically isolated waters, which is the category of waters at issue in *SWANCC*. As the draft GAO report recognizes, field staff are to obtain formal headquarters approval prior to asserting CWA jurisdiction over intrastate, isolated, non-navigable waters based solely on links to interstate commerce. This process was designed to allow the agencies to ensure more consistent application of the regulations, while taking into account all relevant information about a particular body of water.

We agree with the draft GAO report's emphasis on the importance of effective data collection and management, and public access to jurisdictional and other permitting decisions. The Corps is in the process of enhancing and standardizing incorporation of its permit program data into its new nationwide Ombil Regulatory Module (ORM) database. Plans are also underway to geospatially-enable data management and permit decision support in an enhanced system currently described as Geospatial-ORM, or g-ORM. A central part of upgrading ORM to g-ORM is establishing mechanisms, such as web services and internet mapping tools, to share wetland and aquatic resource permit data collected by the Corps with State, Tribal and local resource agencies and the public. EPA is working with the Corps as it makes the nationwide conversion to ORM and the subsequent upgrade to g-ORM, providing some funding but particularly by analyzing potential ways in which g-ORM can be integrated with EPA's Watershed Assessment, Tracking and Environmental Results (WATERS) database. WATERS is an information system that coordinates and summarizes information about water quality and administrative determinations (such as identification of impairments pursuant to CWA Section 303(d). EPA and the Corps believe that integrating this information will improve understanding of the impacts of decisions on aquatic resources.

In closing, EPA appreciates the information provided in the draft report. We are committed to taking actions that further advance transparency, predictability, and consistency of the CWA section 404 program.

Thank you again for the opportunity to comment on your draft report.

Sincerely,

Diane Regas, Director
for Office of Wetlands, Oceans, and Watersheds

GAO Contact and Staff Acknowledgments

GAO Contact

Anu K. Mittal, (202) 512-3841

Staff Acknowledgments

In addition to the contact named above, Doreen Feldman, Curtis Groves, Anne Rhodes-Kline, Sherry McDonald, Ken McDowell, Marcia Brouns McWreath, Greg Peterson, Jerry Sandau, Carol Hernstadt Shulman, and Rebecca Spithill made key contributions to this report.

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