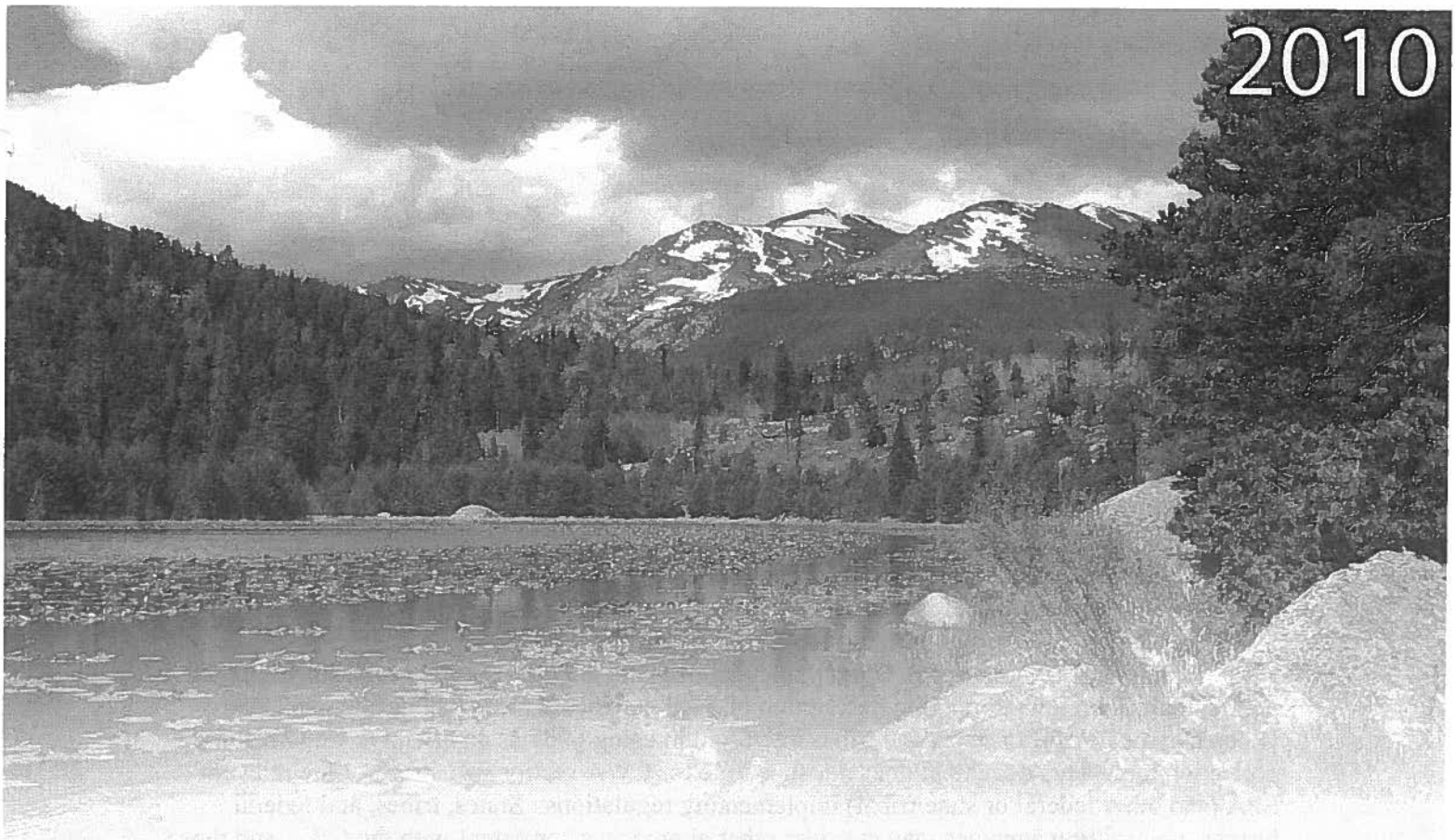

Clean Water Act Section 401 Water Quality Certification:

A Water Quality Protection Tool For States and Tribes

U.S. Environmental Protection Agency
Office of Wetlands, Oceans, and Watersheds

Background and Purpose

Based on two decades of case law and state and tribal program experience, the Environmental Protection Agency has substantially updated its handbook on Clean Water Act (CWA) §401 water quality certification and how states can use §401 certification to protect wetlands and other aquatic resources.

This new handbook, "Clean Water Act Section 401 Water Quality Certification: A Water Quality Protection Tool For States and Tribes", describes CWA §401 certification authorities, the way different state and tribal programs use certification, and how state and tribal certification programs leverage available resources to operate their certification programs.

While this new handbook is not a rule and does not create any legal requirements or set policy, it provides a wide-ranging description of §401 certification provisions and practices which may be helpful to states and tribes interested in using §401 as an effective water resource protection tool. This document does not substitute for CWA section 401 itself, or the relevant EPA (and other federal or state/tribal) implementing regulations. States, tribes, and federal licensing/permitting agencies may consider other approaches consistent with the CWA and those regulations. EPA retains the discretion to revise this handbook in the future.

Table of Contents

Background and Purpose i
I. Introduction 1
II. Threshold Issues Regarding Clean Water Act §401 Certification 3
A. When CWA §401 Certification Applies 3
1. "Federal" Permit or License 3
2. Discharge 4
3. Waters of the U.S. and Waters of the State or Tribe 5
4. Point Sources 5
B. When Jurisdictions Have §401 Certification Authority 6
1. States and Authorized Tribes 6
2. States or Tribes Where a Discharge Originates 7
3. Other Affected States and Tribes 8
C. CWA Section 401 Certification Options 9
1. Grant 10
2. Grant with Conditions 10
3. Deny 10
4. Waive 11
III. The CWA 401 Certification Process 12
A. Timeframes and Opportunities for Review 12
1. When More Time is Needed 13
2. Certification Timeframe for Permits to Construct and Operate Facilities 13
B. Start of the 401 Certification Process 15
C. Scope of Analysis For §401 Certification Decisions 16
1. Basis for Certification Decisions – Generally 18
2. 401 Certification Consideration: Consistency With Water Quality Standards 19
3. 401 Certification Considerations: Effluent Guidelines, New Source Performance Standards and Toxics 20
4. 401 Certification Considerations: Consistency With Other Appropriate Requirements of State and Tribal Law 20
D. Conditioning Federal Licenses and Permits Through §401 Certification 21
1. Appropriate Conditions 22
2. Role of Monitoring and Mitigation 23
3. State and Tribal Laws and Certification Conditions 24
E. Certification Process 25
1. Regulations Describing §401 Certification 25
2. Certification Practices Viewed as Effective by States or Tribes 26
F. Issues Raised by General Permits, After-the-Fact Permits, and Provisional Permits. 29
G. Resolution of §401 Certification-Related Disputes 31
H. Enforcement of §401 Certifications 32
I. Suspension of §401 Certifications 33
IV. Leveraging Available Resources 35
A. Funding and Permit Fees 35
B. Staffing Sources 36

C. Data Sources 37
1. The Applicant 38
2. Other State, Tribal or Local Agencies 38
3. Federal Information Tools 38
4. Professional Societies and Private Sector Tools 41
Appendix A: Clean Water Act Section 401 43

Table of Figures

Figure 1. Certification Agency by Discharge Location 8
Figure 2. Downstream Agency Coordination 9
Figure 3. The Water Quality Certification Process 15
Figure 4. The Water Quality Standards Benchmark 18
Figure 5. Courts of Review for §401 Certifications 32

I. Introduction

Clean Water Act (CWA) §401 water quality certification provides states and authorized tribes[1] with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. This handbook explains the applicability and scope of §401, and provides practical examples drawn from state and tribal experiences about how §401 certification has been used to achieve their water quality goals.

Under §401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived §401 certification. The central feature of CWA §401 is the state or tribe's ability to grant, grant with conditions, deny or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification.[2] Denying certification prohibits the federal permit or license from being issued.[3] Waiver allows the permit or license to be issued without state or tribal comment. States and Tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with EPA-approved water quality standards. In addition, states and tribes consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law.[4]

U.S. Supreme Court in *S. D. Warren Co. v. Maine Board of Environmental Protection*

"State certifications under § 401 are essential in the scheme to preserve state authority to address the broad range of pollution, as Senator Muskie explained on the floor when what is now § 401 was first proposed:

> 'No polluter will be able to hide behind a Federal license or permit as an excuse for a violation of water quality standard[s]. No polluter will be able to make major investments in facilities under a Federal license or permit without providing assurance that the facility will comply with water quality standards. No State water pollution control agency will be confronted with a fait accompli by an industry that has built a plant without consideration of water quality requirements.' 116 Cong. Rec. 8984 (1970).

These are the very reasons that Congress provided the States with power to enforce 'any other appropriate requirement of State law,' 33 U.S.C. § 1341(d), by imposing conditions on federal licenses for activities that may result in a discharge,"[5]

Examples of federal licenses and permits subject to §401 certification include CWA §402 NPDES permits in states where EPA administers the permitting program, CWA §404 permits for discharge of dredged or fill material issued by the Army Corps of Engineers (Corps), Federal

[1] Tribes may receive §401 certification authority when they receive Treatment As a State (TAS) status which is often at the same time as EPA approval of their water quality standards, as further discussed in *II.B.1. States and Authorized Tribe* below.
[2] CWA §401(a)(1); 33 USC1341(a)(1).
[3] CWA §401(a)(1); .33 USC § 1341(a)(1).
[4] CWA §401(d);.33 USC 1341(d).
[5] *S. D. Warren Co. v. Maine Board of Environmental Protection et al,* 547 U.S. 370, 126 S.Ct. 1843 (2006). [Quote from the unanimous U.S. Supreme Court decision affirming the State of Maine's certification authority over a Federal Energy Regulatory Commission dam relicensing.]

Energy Regulatory Commission (FERC) hydropower licenses, and Rivers and Harbors Act §9 and §10 permits for activities that have a potential discharge in navigable waters issued by the Corps. Many states and tribes rely on §401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources.[6] In addition, §401 certification is often a state or tribe's only opportunity to review and appropriately condition or object to the federal permitting or licensing of a hydroelectric project.

Although §401 certification can be an effective tool for protecting water quality, it is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to CWA §401. Although §401 certification by itself is not a comprehensive water quality program for states and tribes, it can nevertheless be an effective water quality protection tool.

[6] *State Wetland Program Evaluation*: Phase I, Environmental Law Institute, 2005; *State Wetland Program Evaluation*: Phase II, Environmental Law Institute, 2006.

II. Threshold Issues Regarding Clean Water Act §401 Certification

This chapter discusses a number of threshold issues regarding §401 certification. Section 401 certification does not apply to all permits or licenses associated with any aquatic resource, and this chapter clarifies the circumstances when §401 certification applies. The chapter also discusses which government agency may exercise §401 certification authority, and the ways in which concerns of downstream jurisdictions are taken into account during the §401 certification process.

A. When CWA §401 Certification Applies

The language of §401(a)(1) is written very broadly with respect to the activities it covers. It states:

> Any applicant for a Federal license or permit to conduct *any* activity including, but not limited to, the construction or operation of facilities, which *may* result in *any discharge* into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates.[7] [emphasis added]

As the statutory language indicates and courts have held, the permit or license must: (a) be issued by a federal agency, (b) for an activity that has the potential to discharge, (c) into a water of the United States, (d) from a point source[8]. This section will discuss each of these terms.

1. "Federal" Permit or License

In order for a §401 water quality certification to be required, the activity causing the discharge must be authorized by a permit or license issued by a federal agency.[9] Federal licenses and permits most frequently subject to §401 water quality certification include CWA §402 (NPDES) permits issued by EPA[10], §404 (dredge and fill) permits issued by the Corps, Federal Energy Regulatory Commission (FERC) hydropower licenses, and Rivers and Harbors Act (RHA) §9 and §10 permits issued by the Corps.

Temporary or "annual licenses" in effect while an application for permit renewal is under review might not require §401 certification where issuance of such temporary licenses is a "ministerial and nondiscretionary act."[11] The most common example of such a license is the annual license renewals issued by FERC while existing hydroelectric dam license renewals are under review.[12] Where interim or other types of permits and licenses are involved, interested

---

[7] CWA §401(a)(1);.33 USC 1341(a)(1).

[8] The Ninth Circuit Court of Appeals has interpreted §401 in light of its broader CWA context and has concluded the discharge must be from a point source to trigger §401. See Section II.A.4 below for more information.

[9] General EPA regulations define a license or permit for the purposes of §401 as, "any license or permit granted by an agency of the Federal Government to conduct any activity which may result in any discharge into ...waters of the United States." 40 CFR § 121.1(a).

[10] As of March 2010, states in which EPA administers the §402 NPDES permit program include New Hampshire, Massachusetts, Idaho, and New Mexico.

[11] *California Trout, Inc. v. FERC,* 313 F.3d 1131, 1134, 1136 (9th Cir. 2002), cert denied, 1245 S.Ct. 85 (2003).

[12] Handbook for Hydroelectric Project Licensing and 5 MW Exemptions from Licensing. Federal Energy Regulatory Commission. Appendix A: Federal Power Act, Part 1. Washington, DC. April 2004. pg A-20; Compliance Handbook. Division of Hydropower and Administrative Compliance. Federal Energy Regulatory Commission. March 2004. pg 89.

parties should consult with EPA, the state or tribal agency, and the federal permitting or licensing agency to determine whether §401 certification applies.

State or tribal implementation of a state permit program in lieu of the federal program does not "federalize" the resulting permits or licenses for purposes for §401. For example, when a state or tribe is approved to administer the §402 or §404 program, permitting authority resides with the state or tribe, not a federal agency, and 401 certification does not apply to those authorizations issued by the state or tribe. The CWA anticipates that states and tribes issuing those permits will ensure consistency with CWA provisions and other appropriate requirements of state and tribal law as part of their permit application evaluation.[13] In addition, Corps regulations indicate that the Corps will seek 401 certification for Corps' dredging projects involving a discharge into waters of the U.S. even though the Corps is not issuing itself a permit.[14]

2. Discharge

Another element required for §401 certification to apply is the potential for a discharge. It is important to note that §401 certification is triggered by the *potential* for a discharge; an actual discharge is not required. There does not have to be an actual discharge or a "discharge of a pollutant." The statute states that, "[a]ny … federal license or permit to conduct any activity … which may result in a discharge."[15] Consequently, the discharge need not be a certainty, only that it "may" occur should the permit or license be granted. However, if no discharge may occur, no water quality certification is required. For example, when a RHA §10 permit is required for the hanging of power lines across a navigable river (RHA §10 water) without a potential discharge to the water, the Corps typically has not sought water quality certification.

In addition, the potential discharge does not need to involve an addition of pollutants. Section 401 certification can be triggered not only where there is discharge of a pollutant (such as would be authorized by §402 or §404 permits), but also where there is a discharge not involving addition of a pollutant, such as water released from the tailrace of a dam.[16] As the U.S. Supreme Court has stated, "[w]hen it applies to water, 'discharge' commonly means a 'flowing or issuing out'"[17] and an addition of a pollutant is not "fundamental to any discharge."[18] A lower court has ruled that allowing more water to flow through a dam's turbines is a discharge for §401 purposes.[19] Two courts have found that a withdrawal of water or reduction in flow does not constitute a discharge.[20]

---

[13] In addition, similar requirements to address the effect of pollutants on downstream jurisdictions exist under CWA §402 and §404 programs when assumed by a State or Tribe. *See, e.g., Arkansas v. Oklahoma*, 503 U.S. 91, 112 S.Ct. 1046 (1992).

[14] Under 33 CFR 336.1(a)(1), Corps practice is to seek 401certification for their dredging projects.

[15] CWA §401(a)(1);.33 USC 1341 (a)(1).

[16] *See, e.g., Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 6-7 (9th Cir.(Or.) 1998 *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006).

[17] *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006).

[18] *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006).

[19] *Alabama Rivers Alliance v. Federal Energy Regulatory Commission*, 325 F.3d 290, 295-6 (DC Cir 2003) in the case installing larger turbines in a hydroelectric dam was found to potentially result in a discharge of larger volumes of water through the dam, triggering water quality certification review.

[20] *Great Basin Mine Watch v. Helen Hankins BLM*, 456 F.3d 955, 963 (9th Cir 2006) in the context of the removal of all flow from a stream in Nevada for use in a gold mine; *State of North Carolina v. Federal Energy Regulatory Commission*, 112 F.3d 1175, 1187 (DC Cir 1997) in the context of withdrawing water from a lake for a municipal

3. Waters of the U.S. and Waters of the State or Tribe

The third element required for §401 certification to apply is that the potential discharge must be into a water of the U.S. The term "waters of the U.S." is defined in EPA and Corps regulations, and applies to all CWA programs. The scope of waters of the U.S. protected under the CWA includes traditionally navigable waters and also extends to include interstate waters, territorial seas, tributaries to navigable waters, adjacent wetlands, and other waters.[22] Since §401 certification only applies where there may be a discharge into waters of the U.S., how states or tribes designate their own waters does not determine whether §401 certification is required. Note, however, that once §401 has been triggered due to a potential discharge into a water of the U.S., additional waters may become a consideration in the certification decision if it is an aquatic resource addressed by "other appropriate provisions of state[tribal] law."[23]

4. Point Sources

In addition to the requirements for a federal permit or license and a discharge into a water of the U.S., some courts have indicated that the discharge

The Regulatory Definition of Waters of the U.S.

"(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States."[21]

---

water supply; the opinion in *Great Basin Mine Watch v. Helen Hankins BLM* also said that states may, but are not required to, regulate water withdrawals or set minimum stream flow standards in water quality certifications, at 963.

[21] 40 CFR § 230.3(s); 33 CFR § 328.3(a).

[22] *Id.* For discussion of evolution of the regulatory definition of "waters of the United States," *see* Downing et al. Clean Water Act Jurisdiction: A Legal Review. Wetlands. Vol. 23. No. 3. 2003. p 477.

[23] *See* CWA §401(d), 33 USC 1341(d). Note that the Corps may consider a 401 certification as administratively denied where the certification contains conditions that require the Corps to take an action outside its statutory authority or are otherwise unacceptable. *See, e.g.,* RGL 92-04, "Section 401 Water Quality Certification and Coastal Zone Management Act Conditions for Nationwide Permits."

[24] 40 CFR § 230.3(s); 33 CFR § 328.3(a).

must be from a point source.[25] The Ninth Circuit Court of Appeals in *ONDA v. Dombeck* held that, "[t]he term "discharge" in §1341 is limited to discharges from point sources."[26] The CWA defines "point source" as "any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel…rolling stock … or vessel…from which pollutants are or may be discharged."[27] Bulldozers and similar equipment are considered point sources[28], as are the tailraces of dams.[29]. While other Circuit Courts of Appeal have not addressed this question, the U.S. in briefs filed before the U.S. Supreme Court suggests that §401 requires the discharge to be from a point source.[30]

B. When Jurisdictions Have §401 Certification Authority

Not all jurisdictions whose water may be affected by a federal permit or license have §401(a)(1) certification authority. Only the state or authorized tribe *where the discharge originates* has the authority to directly condition or prevent issuance of a federal permit or license.[31] States and tribes downstream of the jurisdiction where a discharge originates do not have §401 authority. However, CWA §401(a)(2) provides neighboring states or tribes with an opportunity to object to, and make recommendations for, federal licenses and permits.[32]

1. States and Authorized Tribes

The CWA directly grants all states §401 certification authority, and currently all states have retained their authority. In addition, U.S. territories are considered "states" under the CWA.[33]

Tribes do not automatically have §401 authority, but may request it when granted 'Treatment in the same manner As a State" (TAS) authority by EPA.[34] This often occurs when a tribe is authorized to administer the water quality standards program and has designated the tribal agency that will administer §401. No separate application is required. If granted, tribes possess the same certification authority and responsibilities as states. As of January 2010, 36 tribes had developed water quality standards approved by EPA and have been granted §401 certification

---

[25] "We hold that certification under § 1341 is not required for grazing permits or other federal licenses that may cause pollution solely from nonpoint sources." *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 7 (9th Cir.(Or.) 1998).

[26] *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 5 (9th Cir.(Or.) 1998).

[27] 33 USC 1362(14); CWA §502(14); Case law has indicated that point sources also include bulldozers and similar equipment: *Avoyelles Sportsmen's League v. Marsh*, 715 F.2d 897, 922 (1983).

[28] *See, e.g., Avoyelles Sportsman's League, Inc. v. Marsh*, 715 F.2d 897, 922 (5th Cir. 1983).

[29] *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 6 (9th Cir.(Or.) 1998). Also supported by, *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006). *Jefferson County PUD v. Washington Dept. of Ecology*, 511 U.S. 711 (1994).

[30] *See, e.g., Amicus brief of the United States in S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006), found at 2006 WL 53960 (January 9, 2006).

[31] CWA §401(a)(1); 33 USC 1341(a)(1).

[32] In some cases, such as when the backwater pool area for a reservoir extends into another state or tribe, neighboring states or tribes may comment without being downstream.

[33] CWA §502(3); 33 USC 1362(3): "The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands."

[34] CWA §401(a)(1); 33 USC 1341(a)(1).

authority.[35] Courts have held that tribal water quality standards and §401 certification authority extend to non-Indian fee land within a reservation.[36]

Where the discharge originates within a jurisdiction without §401 authority, EPA is the certifying agency. Section 401(a)(1) states, "In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator [EPA]."[37] As a result, EPA typically acts as the certifying authority on tribal lands when the tribe lacks certification authority.

2. States or Tribes Where a Discharge Originates

The courts have interpreted §401 to mean that the state or tribe in which a discharge originates has §401 certification authority.[38] When a facility is located within one state but the end of its discharge pipe is located in the waters of another state, the jurisdiction where the discharge enters the waters of the U.S. has certification authority. The state with jurisdiction over the receiving waters has a direct interest in the quality of its resulting water quality, while the state in which the facility is located may have a variety of other concerns not directly related to the waters affected by the discharge. Similarly, the state where the discharge enters a "water of the U.S." is likely better positioned to monitor and inspect for compliance with any 401 certification conditions on the discharger's permit or license.

---

[35] Region 2: Saint Regis Mohawk Tribe. Region 4: Seminole of Florida; Miccosukee Tribe of Indians of Florida; Region 5: Mole Lake Band of the Lake Superior Tribe of the Chippewa Indians, Sokaogon Chippewa Community; The Fond du Lac Band of the Minnesota Chippewa Tribe; Grand Portage Band of the Minnesota Chippewa Tribe. Region 6: Ohkay Owingeh (Pueblo of San Juan); Pueblo of Acoma; Pueblo of Isleta; Pueblo of Nambe; Pueblo of Picuris; Pueblo of Pojoaque; Pueblo of Sandia; Pueblo of Santa Clara; Pueblo of Taos; Pueblo of Tesuque. Region 8: Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation; Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation;. Region 9: Big Pine Paiute Tribe of the Owens Valley; Bishop Paiute Tribe;Hoopa Valley Tribe; Hopi Tribe; Hualapai Tribe; Pyramid Lake Paiute Tribe;White Mountain Apache. Regions 6, 8 and 9: Navajo Nation. Region 10: Confederated Tribes of the Chehalis Reservation; Confederated Tribes of the Colville Reservation; Confederated Tribes of the Umatilla Indian Reservation of Oregon; Confederated Tribes of the Warm Springs Indian Reservation of Oregon; Kalispel Indian Community of the Kalispel Reservation; Lummi Nation; Makah Tribe; Port Gamble S'Klallam Tribe; Puyallup Tribe of Indians; and the Spokane Tribe of Indians.

[36] *See*, e.g., *State of Montana v. United States Environmental Protection Agency*, 137 F.3d 1135, 1141 (9th Cir 1998).

[37] 33 USC 1341(a)(1); CWA §401(a)(1).

[38] "[A] certification from the State in which the discharge originates or will originate" 33 USC 1341(a)(1); CWA §401(a)(1); "[O]nly required to obtain a certification from the state where the discharge originates." *National Wildlife Federation v. Federal Energy Regulatory Commission*, 912 F.2d 1471, 1483-1484 (DC Cir 1990).

Players in the Water Quality Certification Process		
Origin of the Discharge		**Certifying entity ***
Within the borders of a state with a designated certification authority	→	State certifying agency
On tribal land that has been granted TAS and 401 certification authority	→	Tribal certifying agency
Within the borders of a state or tribal holdings where no certification authority exists	→	EPA
*Other states and tribes may be involved in the certification process through the downstream effects consultation process found in §401(a)(2).		

Figure 1. Certification Agency by Discharge Location

3. Other Affected States and Tribes

Although §401 certification authority rests with the jurisdiction where the discharge originates, neighboring states and tribes downstream[39] or otherwise potentially affected by the discharge have an opportunity to raise objections to, and comment on, the federal permit or license.[40] The EPA Administrator determines if a discharge subject to §401 certification "may affect" the water quality of other states or tribes, and EPA is required to notify those other jurisdictions whose water quality may be affected.[41] The other jurisdictions are then provided an opportunity to submit their views and objections about the proposed license or permit and associated §401 certification. They may also request that the federal permitting or licensing agency hold a hearing at which, "the [EPA] Administrator shall … submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency."[42] The federal licensing or permitting agency "shall condition such license or permit in such manner as may be necessary to ensure compliance with applicable water quality requirements."[43] Recommendations from neighboring jurisdictions do not have the same force as conditions from a §401 certifying state. While the Federal agency must develop measures to address the downstream jurisdictions' concerns, the agency may develop its own measures and does not need to adopt the downstream state or tribe's specific recommendations without modification, as it would were they from the §401 certifying agency. If the Federal agency "cannot ensure compliance" with the other state or tribe's water quality requirements, it "shall not issue such license or permit."[44]

[39] In some cases, such as when the backwater pool area for a reservoir extends into another state or tribe, neighboring states or tribes may comment without being physically downstream.
[40] CWA §401(a)(2), 33 USC 1341. Note that the CWA establishes processes to address the effect of pollutants on downstream stakeholders exist under CWA §§ 402 and 404 programs when assumed by a state or tribe. For example: *Arkansas v. Oklahoma*, 503 U.S. 91, 112 S.Ct. 1046 (1992).
[41] CWA §401(a)(2); 33 USC 1341(a)(2).
[42] CWA §401(a)(2); 33 USC 1341(a)(2)
[43] CWA §401(a)(2); 33 USC 1341(a)(2).
[44] CWA §401(a)(2); 33 USC 1341(a)(2).

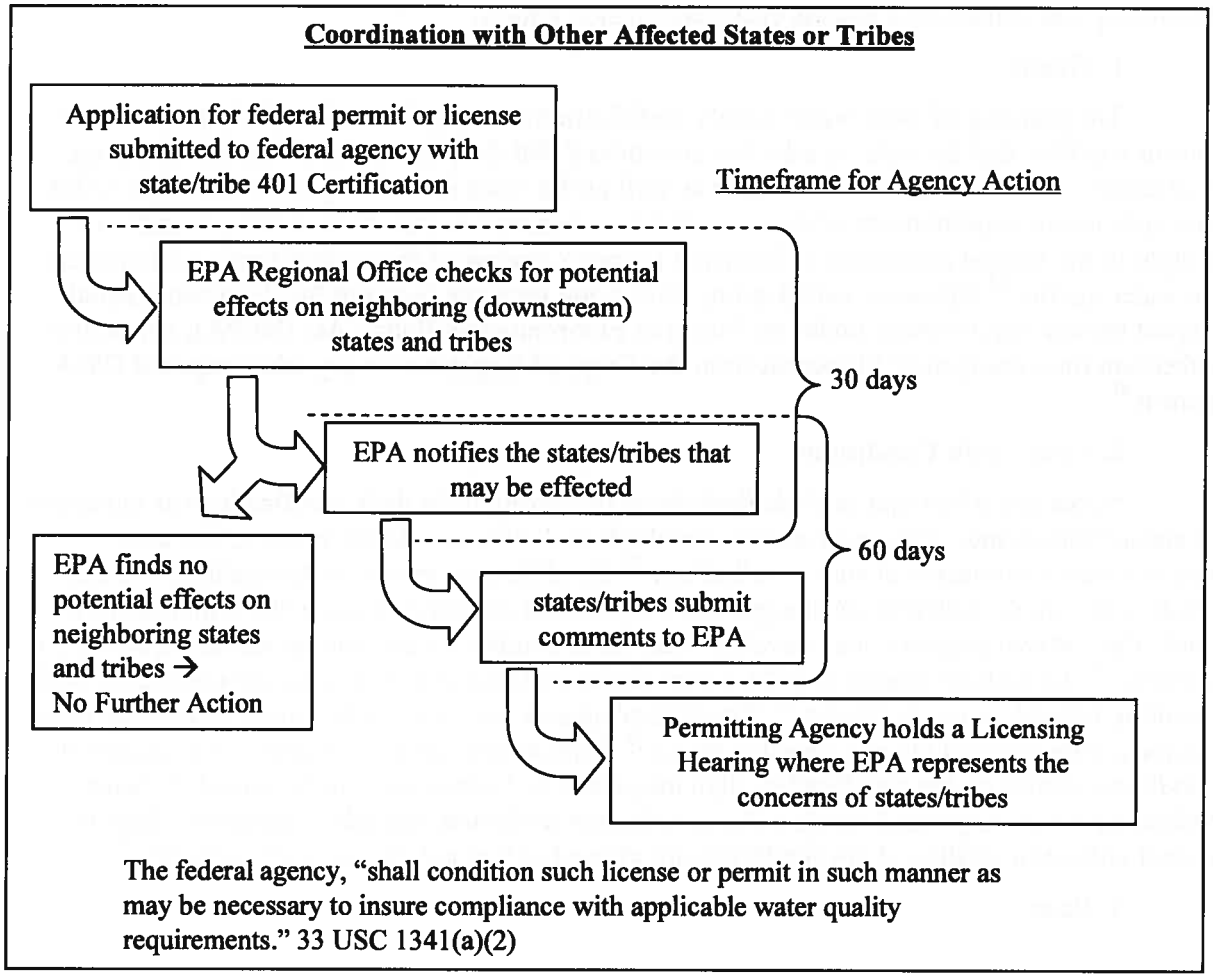

Figure 2. Downstream Agency Coordination

C. CWA Section 401 Certification Options

The central component of §401 certification is the state or tribe's decision to grant, condition, deny or waive certification. In essence, the state or authorized tribal[45] agency decides whether the licensed or permitted activity and discharge will be consistent with a number of specifically identified CWA provisions: effluent limitations for conventional and non-conventional pollutants (§301 and §302), water quality standards (§303), new source performance standards (§306), and requirements for toxic pollutants (§307).[46] Section 401(d) requires inclusion of license or permit conditions to ensure compliance with these listed CWA provisions, as well as appropriate requirements of state or tribal law.[47] A state or tribe

[45] Tribes authorized to use §401 certification authority have developed water quality standards and designated an agency to administer the certification authority, as further discussed in *II.B.1. States and Authorized Tribes* above.
[46] 33 CWA §401(a)(1); USC 1341(a)(1).
[47] CWA §401(d); 33 USC 1341(d); *S. D. Warren Co. v. Maine Board of Environmental Protection et al,* 547 U.S. 370, 126 S.Ct. 1843 (2006); *Jefferson County PUD v. Washington Dept. of Ecology,* 511 U.S. 700, 711 (1994).

certification is intended to ensure that all these provisions and requirements will be met. The following four subsections discuss each certification option.

1. Grant

The granting of §401 water quality certification to an applicant for a federal license or permit signifies that the state or tribe has determined that the proposed activity and discharge will comply with water quality standards as well as the other identified provisions of the CWA and appropriate requirements of state or tribal law. Granted certifications receive significant weight in the federal permitting or licensing agency's review of the project's potential impacts on water quality.[48] However, certification review and issuance does not fulfill environmental impact review requirements under the National Environmental Policy Act (NEPA), nor does it substitute for a dredged or fill permit from the Corps of Engineers or any other required CWA permit.[49]

2. Grant with Conditions

States and tribes may include limitations or conditions in their certifications as necessary to ensure compliance with water quality standards and other provisions of the CWA and appropriate requirements of state or tribal law.[50] Conditions to protect water quality need not focus solely on the potential discharge. Once a potential discharge triggers the requirement for §401, the certifying agency may develop "additional conditions and limitations on the activity as a whole."[51] Conditions placed in §401 water quality certifications must become conditions of the resulting federal permit or license.[52] The federal agency may not select among conditions when deciding which to include and which to reject.[53] If the federal agency chooses not to accept all conditions placed on the certification, then the permit or license may not be issued.[54] Some federal agencies may decide to view the certification as denied, and administratively deny the permit without prejudice, if the conditions are viewed as beyond the agency's authority.[55]

3. Deny

---

[48] Water Quality Standards Handbook. Second Edition. US EPA. August 1994. Chapter 7.6.3.

[49] Section 401 certification does not fulfill any requirements under NEPA, *Calvert Cliffs' Coordinating Committee, Inc. v. United States Atomic Energy Commission*, 449 F.2d 1109, 1125 (DC Cir. 1971); Section 401 certification does not substitute for other CWA permit requirements, *Monongahela Power Company v. John O. Marsh*, 809 F.2d 41, 53 (DC Cir 1987).

[50] 33 USC 1341(d); CWA §401(d); *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006). *Jefferson County PUD v. Washington Dept. of Ecology*, 511 U.S. 700, 711 (1994).

[51] *Jefferson County PUD v. Washington Dept. of Ecology*, 511 U.S. 700, 712 (1994).

[52] CWA 401(d), 33 USC 1341(d).

[53] *American Rivers v. Federal Energy Regulatory Commission*, 129 F.3d 99, 110-111 (2d Cir, 1997).

[54] 33 USC 1341(a)(1); CWA §401(a)(1); *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 110-111 (2nd Cir 1997); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 868 (9th Cir 1993); *Puerto Rico Sun Oil Company v. United States Environmental Protection Agency*, 8 F.3d 73, 74-75 (1st Cir 1993); *Roosevelt Campobello International Park Commission v. United States Environmental Protection Agency*, 684 F.2d 1041, 1056 (1st Cir 1982); *US v. Marathon Development Corporation*, 867 F.2d 96, 99 (1st Cir. 1989).

[55] Note that the Corps may consider a 401 certification as administratively denied where the certification contains conditions that require the Corps to take an action outside its statutory authority or are otherwise unacceptable. *See, e.g.*, RGL 92-04, "Section 401 Water Quality Certification and Coastal Zone Management Act Conditions for Nationwide Permits."

States and tribes deny certification if the activity and discharge will not comply with the applicable sections of the CWA and appropriate requirements of state and tribal law.[56] The denial of §401 certification by a state or tribe prohibits the federal agency from issuing the permit or license in question.[57]

> ***S. D. Warren Co. v. Maine Board of Environmental Protection et al***
>
> "Section 401 recast pre-existing law and was meant to 'continu[e] the authority of the State ... to act to deny a permit and thereby prevent a Federal license or permit from issuing to a discharge source within such State.' S.Rep. No. 92-414, p. 69 (1971). Its terms have a broad reach, requiring state approval any time a federally licensed activity 'may' result in a discharge ('discharge' of course being without any qualifiers here), 33 U.S.C. § 1341(a)(1), and its object comprehends maintaining state water quality standards."[60]

4. Waive

States and tribes are authorized to waive §401 certification, either explicitly, through notification to the applicant, or by the certification agency not taking action. If action is not taken on a certification request, "within a reasonable time (which shall not exceed one year)," the state or authorized tribe has waived the requirement for certification. The amount of time allowed for action on a certification application is determined by the Federal agency issuing the license or permit, while the certifying agency determines what constitutes a "complete application" that starts the timeframe clock.[58] To avoid waiving inadvertently, a state or tribal agency receiving a request for certification should consult with the federal licensing or permitting agency to verify the time available for their certification decision. However, the onus for applying for water quality certification lies with the permit or license applicant, and waiver can not occur without a request for certification.[59]

Under the CWA, waiver does not indicate a state or tribe's substantive opinion regarding the water quality implications of a proposed activity or discharge. A state or tribe may waive certification for a variety of reasons, including a lack of resources to evaluate the application. Waiver merely means the federal permitting or licensing agency may continue with its own application evaluation process and issue the license or permit in the absence of an affirmative state or tribal certification.

---

[56] 33 USC 1341(a)(1); CWA §401(a)(1).

[57] CWA 401(a)(1); 33 USC 1341(a)(1).

[58] The Fourth Circuit observed that certification agencies prescribe the required procedure for requesting certification and starting the review or waiver countdown. *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1112 (4th Cir 1989); 33 USC 1341(a)(1); CWA §401(a)(1); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

[59] *State of North Carolina v. FERC,* 112 F.3d 1175, 1184 (D.C. Cir 1997); *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1111-1112 (4th Cir 1989).

[60] *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843, 1851 (2006).

III. The CWA 401 Certification Process

The previous chapter discussed threshold issues affecting when CWA §401 certification applies and what certification options states and tribes have (grant, grant with conditions, deny, or waive). This section discusses some of the details of the §401 certification process, including receipt of an application, review by the state or authorized tribe[61], and enforcement and dispute resolution issues. Where possible, the chapter illustrates its points with examples taken from state and tribal experiences.

A. Timeframes and Opportunities for Review

The federal permitting or licensing agency may set the certification response time limit to any "reasonable period of time (which shall not exceed one year)."[62] If the certifying agency does not respond within the time limit, §401 certification is waived.[63] As discussed below, federal agencies have established varying timeframes up to one year. An initial step, therefore, is for the certifying agency to verify the amount of time it has for its §401 analysis.

Federal agencies may define what is a "reasonable time" for purposes of §401 certification of their permits or licenses, provided the period is less than one year in duration. For example, some Corps Districts provide a response period of 60 days for a §401 certification associated with a CWA §404 permit. FERC normally allows a full year for states and tribes to develop a §401 certification response. EPA regulations governing the certification of federally-issued CWA §402 NPDES permits allow states and tribes 60 days to issue certification.[64] EPA regulations applicable in other contexts suggest a time limit of six months.[65]

Not all Corps Districts use a 90-day time frame for certification of 404 permits.[66] For example, while the Savannah Army Corps of Engineers (Corps) District has a self-imposed 120 day timeline for making permit decisions, it has placed no limit on receipt of state certification other than the statutory one year. Should Georgia not issue a §401 certification by the 120-day deadline for §404 permit issuance, the District may issue a provisional permit that is not valid unless the conditions listed on the cover page, such as obtaining §401 certification, are met.[67] Shorter certification timeframes apply in other places such as Florida, where the certification time limit is 90 days for individual Corps permits and 30 days for Corps Nationwide General Permits that did not receive categorical certifications.[68] For their part, state and tribal

---

[61] Tribes authorized to use §401 certification authority have received "Treatment as a State" (TAS) status, and have designated an agency to administer the certification authority. As further discussed in *II.B.1. States and Authorized Tribes* above, typically authorized tribes also have developed EPA-approved water quality standards.

[62] CWA §401(a)(1); 33 USC 1341(a)(1).

[63] CWA §401(a)(1); 33 USC 1341(a)(1); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

[64] 40 CFR §124.53(c)(3).

[65] 40 CFR §121.16(b). ("which period shall generally be considered to be 6 months, but in any event shall not exceed 1 year.")

[66] Corps Districts may establish agreements with states or tribes to have longer or shorter timeframes for water quality certification decisions than the 60 days provided in regulations. *See, e.g.*, RGL 87-03.

[67] Savannah Corps District. Provisional permit cover sheet.

[68] CWA Section 404 Nationwide General Permits are certified as a category every five years at reissuance. If categorical certification is denied for any Nationwide permit, each individual project wishing to be authorized under the Nationwide permit would require 401 certification.

certification agencies may adopt procedural requirements regarding certification, for example specifying that the receipt of agency certification requests starts the certification review time period.[69] While such requirements may help ensure that states and tribes have adequate time for their 401 review, it is important that they note the time frame at the time the certification application is received and consult with the Federal licensing or permitting agency early about any concerns.

1. When More Time is Needed

In cases where the certifying agency believes it needs more information or time to review the license or permit before issuing a certification, and it has not been able to work out an appropriate time frame with the licensing or permitting Federal agency, states have tended to take two approaches. Some states on occasion have suggested the applicant withdraw and resubmit its application for certification (restarting the certification clock), as an alternative to denying certification based on gaps in analyses or information. This withdraw-resubmission process potentially gives the applicant and the §401 certifying agency time to produce requested reports, and is intended to give the certifying agency additional time to review the relevant information and issue a certification. Note that the withdraw-resubmission process can result in the federal agency being unable to act in a timely manner on permit or license applications. As an alternative approach, some states have denied §401 certification "without prejudice" when they lack data necessary for their analysis, and then encouraged the applicant to resubmit the application with the application fee waived as long as they continue to abide by the standard public notice requirements.[70]

2. Certification Timeframe for Permits to Construct and Operate Facilities

Another issue related to timeframes occurs when one federal permit or license is required for the construction of a facility and a separate federal permit or license is required for its operation. Generally, §401 requires certification of the construction permit or license and then only notice of application for a permit or license to operate the new facility, unless construction and operation would be certified by a different state certification authority.[71] Upon receiving notice of application for a permit or license to operate the new facility, the certifying agency has 60 days to determine if;

> [T]here is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this [CWA] title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which

---

[69] The Fourth Circuit observed that certification agencies prescribe the required procedure for requesting certification and starting the review or waiver countdown. *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1112 (4th Cir 1989).

[70] This handbook does not endorse either of the two approaches, but emphasizes the need for coordination regarding necessary information early in the certification process in order to avoid denial or withdrawal due to data gaps. FERC believes that both of these approaches can often result in delays and impair FERC's ability to act on hydropower license, relicense, and amendment applications in a timely manner.

[71] CWA §401(a)(3); 33 USC 1341(a)(3); *Keating v. Federal Energy Regulatory Commission*, 927 F.2d 616, 623 (DC Cir 1991)(The statute allows a state to revoke a prior certification only within a specified time limit and only pursuant to certain defined circumstances.); *State of North Carolina v. FERC,* 112 F.3d 1175, 1184 (D.C. Cir 1997) (Section 401(a)(3) does not, however, require a state with certification rights pertaining only to the operation of a project to assert those rights at the time a construction permit is issued for the project).

> such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements.[72]

If the certifying agency does not respond within sixty days to the notice, the certification of construction of the facility also serves as certification of operation of the facility.[73] CWA §401 certification of any federal permit or license required for construction of a facility will satisfy §401 certification requirements for federal permits or licenses required for operation of the facility as well, if the certification agency finds the project has not changed in any of the ways laid out in §401(a)(3) discussed above.[74] Note that certification of construction cannot serve as certification of operation if the applicant has failed to provide notice to the certifying agency of: (1) the application for a permit or license to operate the facility, or (2) any proposed changes in the construction or operation of the facility that may result in a violation of effluent limitations (CWA §301), water quality related effluent limitations (CWA §302), water quality standards and implementation plans (CWA §303), national standards of performance (CWA §306), toxic and pretreatment effluent standards (CWA §307) or other appropriate requirements of state or tribal law.[75]

In the case where construction requires a federal permit or license and §401 certification, but operation of the facility does not require a federal permit or license, the facility must provide an opportunity for the §401 certification authority:

> [T]o review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated.[76]

If the certifying agency finds that the operation of the facility will violate water quality requirements but will not trigger the review procedure under §401(a)(3) (change in construction, operation, or water quality requirements), the certifying agency notifies the federal agency that issued the permit or license authorizing construction of the facility. Then the "Federal agency may, after public hearing, suspend such license or permit."[77] If suspension is issued, it shall remain in effect until the certifying agency provides notice to the federal agency that the facility will not violate the applicable water quality requirements.[78] To ensure that adequate consideration is given to water quality impacts of facility operation, as well as to minimize the need for such after-the-fact suspensions (which are solely at the discretion of the Federal agency), states should review all such impacts at the time of initial certification, and include conditions in their certifications to address them as appropriate.

---

[72] CWA §401(a)(3); 33 USC 1341(a)(3).
[73] CWA §401(a)(3); 33 USC 1341(a)(3); *Keating v. FERC*, 927 F.2d 616, 623 (DC Cir 1991).
[74] *Keating v. FERC*, 927 F.2d 616, 624 (DC Cir 1991).
[75] *State of North Carolina v. FERC*, 112 F.3d 1175, 1184 (D.C. Cir 1997); *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1111-1112 (4th Cir 1989); CWA §401(a)(3); 33 USC 1341(a)(3); CWA §401(d);33 USC 1341(d).
[76] CWA §401(a)(4); 33 USC 1341(a)(4).
[77] CWA §401(a)(4); 33 USC 1341(a)(4).
[78] CWA §401(a)(4); 33 USC 1341(a)(4).

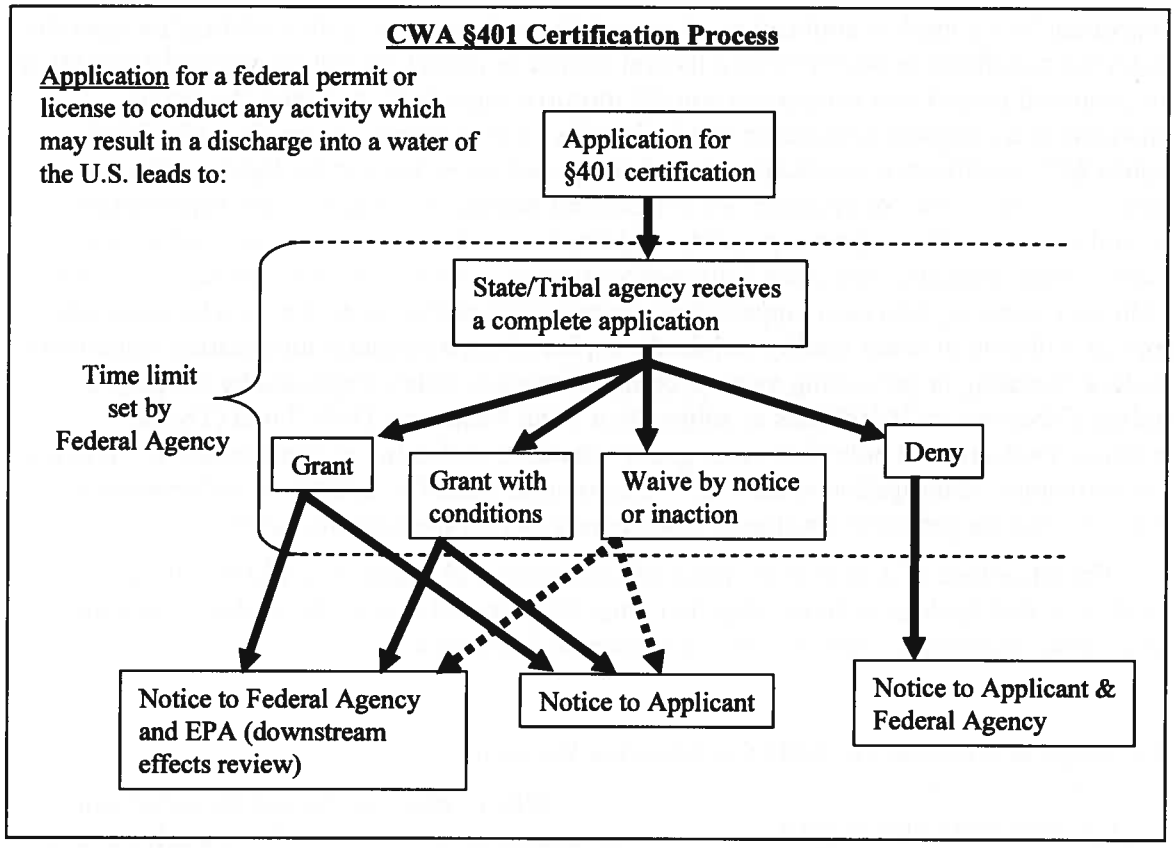

Figure 3. The Water Quality Certification Process

B. Start of the 401 Certification Process

Section 401 indicates that an application for a federal permit or license that may result in a discharge to waters of the U.S. cannot be considered complete unless accompanied by a grant or waiver of §401 certification.[79] "No license or permit shall be granted until the certification … has been obtained or has been waived."[80], [81] As a result, the applicant is responsible for requesting the necessary §401 certification from the state or tribe.[82]

States and tribes often establish their own specific requirements for a complete application for water quality certification.[83] Generally, the state or tribe's §401 certification review timeframe begins once a request for certification has been made to the certifying agency,

[79] 33 USC 1341(a)(1); CWA §401(a)(1); *Puerto Rico Sun Oil Company v. EPA*, 8 F.3d 73, 74 (1st Cir 1993); *US v. Marathon Development Corporation*, 867 F.2d 96 (1st Cir. 1989).
[80] CWA §401(a)(1); 33 USC 1341(a)(1).
[81] Note that the process in practice is not always linear. For example, FERC's licensing regulations indicate that once the Commission determines that the application is complete, it issues a "Ready for Environmental Analysis" notice instructing the license applicant to request water quality certification from the state certifying agency within 60 days of notice issuance.
[82] *State of North Carolina v. FERC*, 112 F.3d 1175, 1184 (D.C. Cir 1997); *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1111-1112 (4th Cir 1989).
[83] *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1112 (4th Cir 1989).

accompanied by a complete application. A complete application for §401 certification typically includes the completed application for a federal license or permit, including detailed descriptions of the proposed project and anticipated aquatic resource impacts.[84] At times, the list of components of a complete application can be lengthy. For example, Oregon has identified a complete §401 certification application for a §404 permit as including: the legal name and address of activity owner or operator; legal name and address of the authorized representative; name and addresses of contiguous property owners; complete written description of activity, including maps, diagrams, and other information; names of affected waters, including wetlands and tributary streams; land use compatibility statement; identified steps that will be undertaken to prevent violation of water quality standards; copies of environmental information submitted to the federal licensing or permitting agency; confirm status of waters impacted by the project, including if they are on 303(d) lists or subject to a Total Maximum Daily Load (TMDL) calculation; evaluation of potential water quality standard violations or contribution to violation; and identification of mitigation measures.[85] Oregon also identifies additional information that may be required for projects in wetlands and streams and for hydropower projects.

The advantage of a clear description of components of a complete §401certification application is that applicants know what they must be prepared to provide, and applicant and agencies alike understand when the review timeframe has begun.

C. Scope of Analysis For §401 Certification Decisions

U.S. Supreme Court in *PUD v Washington Department of Ecology*:

"Section 401(d) thus allows the State to impose 'other limitations' on the project in general to assure compliance with various provisions of the Clean Water Act and with 'any other appropriate requirement of State law'... Section 401(a)(1) identifies the category of activities subject to certification--namely, those with discharges. And §401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied."[88]

When Congress enacted the water quality certification provisions in 1970, it wanted to ensure that no federal license or permit would be issued "for an activity that through inadequate planning or otherwise could in fact become a source of pollution."[86] As incorporated into the 1972 CWA, §401 water quality certification was intended to ensure that no federal license or permits would be issued that would prevent states or tribes from achieving their water quality goals, or that would violate CWA provisions. Specifically, the statute calls for states or tribes to base their certification on a consideration of whether the permit or license would be consistent with a list of CWA authorities including water quality standards and effluent limitations, as well as "any other appropriate requirement of State [or tribal] law set forth in such certification."[87] It is important to note that, while EPA-approved state and tribal water quality standards may be a major consideration driving §401 decision, they are not the only consideration.

[84] CWA §401(a)(1,3); 33 USC 1341(a)(1, 3); *State of North Carolina v. FERC,* 112 F.3d 1175, 1184 (D.C. Cir 1997); *City of Fredericksburg v. Federal Energy Regulatory Commission,* 876 F.2d 1109, 1111-1112 (4th Cir 1989).
[85] OAR 340-048-0020; see also http://www.deq.state.or.us/wq/sec401Cert/process.htm#min.
[86] 115 Cong. Rec. H9030 (April 15, 1969)(House debate); 115 Cong. Rec. S28958-59 (Oct. 7, 1969) (Senate debate).
[87] CWA §401(d); 33 USC 1341(d).

As noted in the previous section, the CWA indicates that §401 certification of a permit or license for the construction of any facility may fulfill the requirements for certification in connection with any other federal license or permit required for the operation of such facility.[89] In other words, certification of a construction permit or license generally also operates as certification for an operating permit or license. Thus, it is important for the §401 certification authority to consider all potential water quality impacts of the project, both direct and indirect, over the life of the project.[90] For example, certification of a new hydroelectric dam subject to licensing by FERC would consider water resource implications of both the dam's construction and operation, for the life of the permit.

Three exceptions to this general rule of "one certification" exist. First, if the §401 certification of permits for project construction is from a different jurisdiction than where a potential discharge would originate during facility operation, then the federal operating permit would require an additional certification from the state or tribe in which the operational discharge would originate.[91] The second exception exists where there have been unanticipated changes to the facility, receiving water quality, water quality standards, or other CWA requirements (see the box below).[92] Third, the general rule does not apply if the applicant failed to provide notice to the certifying agency, "of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted."[93] In short, certification of a permit or license for the construction of a facility will fulfill the requirements for certification of any other construction or operation permits or licenses for the facility as long as the potential impacts from construction and operation are within the same jurisdiction and there is no change in the facility, the receiving water, water quality standards or other CWA requirements.

Certification of Construction And Certification of Operation: CWA §401(a)(3)

"The certification obtained...with respect to the construction of any facility shall fulfill the...certification...for the operation of such facility unless, after notice to the certifying... agency...[the certifying] agency...notifies such [federal] agency within sixty days...that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying...agency... with notice of any proposed changes in the construction or operation of the facility...which changes may result in violation of section 301, 302, 303, 306, or 307 of this title."

---

[88] *Jefferson County PUD v. Washington Dept. of Ecology,* 511 U.S. 700, 712 (1994).

[89] 33 USC 1341(a)(3); CWA §401(a)(3); "The statute allows a state to revoke a prior certification only within a specified time limit and only pursuant to certain defined circumstances" *Keating v. Federal Energy Regulatory Commission*, 927 F.2d 616, 623 (DC Cir 1991); "Section 401(a)(3) does not, however, require a state with certification rights pertaining only to the operation of a project to assert those rights at the time a construction permit is issued for the project." *State of North Carolina v. FERC,* 112 F.3d 1175, 1184 (D.C. Cir 1997).

[90] In *PUD 1* the court found that, "activities—not merely discharges—must comply with state water quality standards." *Jefferson County PUD v. Washington Dept. of Ecology,* 511 U.S. 700, 712 (1994).

[91] *National Wildlife Federation v. Federal Energy Regulatory Commission*, 912 F.2d 1471, 1483-1484 (DC Cir 1990).

[92] 33 USC 1341(a)(3); CWA §401(a)(3); See also *Keating v. FERC*, 927 F.2d 616, 622 (DC Cir 1991).

[93] 33 USC 1341(a)(3); CWA §401(a)(3).

Section 401 applies to any federal permit or license for an activity that may discharge into a water of the U.S. The Ninth Circuit Court of Appeals has ruled that the discharge must be from a point source, and agencies in other jurisdictions have generally adopted the requirement.[94] Once these thresholds are met, the scope of analysis and potential conditions can be quite broad. As the U.S. Supreme Court has held, once §401 is triggered, the certifying state or tribe may consider and impose conditions on the project activity in general, and not merely on the discharge, if necessary to assure compliance with the CWA and with any other appropriate requirement of state or tribal law.[95]

For example, water quality implications of fertilizer and herbicide use on a subdivision and golf course might be considered as part of a §401 certification analysis of a CWA §404 permit that would authorize discharge of dredged or fill material to construct the subdivision and golf course. Note that the Corps may decide to consider a certification with conditions it views as beyond its statutory authority as a denial, and not issue the section 404 or section 10 permit.[96]

1. Basis for Certification Decisions – Generally

In order to obtain certification of any proposed activity that may result in a discharge to waters of the U.S., an applicant must demonstrate that the proposed activity and discharge will not violate or interfere with the attainment of any limitations or standards identified in §401(a) and (d). Specifically, the statute provides that an applicant for a federal license or permit obtain a certification that the discharge and activity is consistent with state or tribal effluent limitations (CWA §301), water quality related effluent limitations (CWA §302), water quality standards and implementation plans (CWA §303), national standards of performance (CWA §306), toxic and pretreatment effluent standards (CWA §307) and "any other appropriate requirement of State [or Tribal] law set forth in such certification."[97]

Water Quality Standards:
A benchmark for water quality protection

Standards provide the foundation for a broad range of water quality management activities including, but not limited to, monitoring under §§ 305(b) and listing /TMDL development under section 303(d), permitting under §§ 402 and 404, water quality certification under §401, and the control of non-point source pollution under §319. Standards also provide a benchmark for the assessment of wetland impacts. Such standards, however, are not the only consideration during a §401 certification analysis.

Figure 4. The Water Quality Standards Benchmark

Certifying agencies often develop procedures and a list of considerations that they deem necessary as part of their certification analysis to ensure compliance with the appropriate CWA provisions and requirements of state or tribal law related to the maintenance, preservation, or enhancement of water quality. For example, North Carolina has developed a list of assessment formulas and general certification conditions relating to project impacts, buffers, violation sites,

[94] *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 5 (9th Cir.(Or.) 1998); *ONDA v. U.S. Forest Service*, 550 F.3d 778 (9th Cir. 2008). Discussions with more than a dozen certification agencies in 2005 did not reveal one case of certification being given or required for federal permits or licenses for non-point source discharges into waters of the U.S.

[95] *Jefferson County PUD v. Washington Dept. of Ecology*, 511 U.S. 700, 711-712 (1994); *S. D. Warren Co. v. Maine Board of Environmental Protection et al*, 547 U.S. 370, 126 S.Ct. 1843 (2006).

[96] *See, e.g.*, RGL 92-04, "Section 401 Water Quality Certification and Coastal Zone Management Act Conditions for Nationwide Permits."

[97] CWA §401(d); 33 USC 1341(d).

stormwater, surface water classifications, dams and ponds, wetlands and others that are reviewed for applicability to each project, so that all projects are held to the same standards and undergo the appropriate level of scrutiny. In Georgia, coordination between the certifying agency and the state fish and wildlife agencies has led to certification conditions designed to protect state species of concern that are tied to water quality goals in state law. Texas and Virginia certifications both rely on "No Net Loss" goals laid out in statute or regulation when requiring adherence to the avoidance, minimization and mitigation standards found in the CWA §404(b)(1) guidelines.

Whatever the basis of the certifying agency's decision, thorough and clear documentation of the information and rationale used to reach the decision will help to educate the applicant and the public of the importance of water quality protection. Equally important, thorough and clear documentation can help to ensure that the certification is defensible should it be challenged in court or during public comment.

2. 401 Certification Consideration: Consistency With Water Quality Standards

As noted above, water quality standards are often the starting point for determining an appropriate response to a §401 certification request. States and tribes adopt EPA-approved water quality standards pursuant to CWA §303, and base those standards on the waters' use and value for ". . . public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation."[98] These water quality standards and the state's and tribe's §401 implementing regulations and guidelines are, perhaps, the most important tools for the implementation of §401. Note that water quality standards adopted by a state or tribe but not yet approved by EPA may still be relevant during the §401 certification process as "other appropriate requirement" of state or tribal law.[99]

Water quality standards consist of designated uses, criteria (narrative and numeric), and an antidegradation policy, which together provide environmental benchmarks for each class of water body. In practice, narrative and numeric criteria are often the clearest benchmarks for assessment of potential project impacts.

Across the country water quality standards have been developed for different open water bodies such as lakes, rivers and estuaries. In most areas of the country, however, water quality standards have not been developed specifically for wetlands. Wetland types vary over a wide gradient of physical, chemical and biological conditions that do not always reflect the characteristics of adjacent open water bodies. Therefore, the application of open water standards to wetlands can present challenges. One way to help ensure comprehensive consideration of wetlands in the §401 certification process is by creating wetland-specific water quality standards. Several states rely on their antidegradation policies for developing certification conditions. South Carolina has developed an implementation manual for applying its antidegradation policy to wetlands which has helped them more comprehensively assess wetlands impacts.[100]

---

[98] CWA §303(c)(2)(A);.33 USC 1313 (c)(2)(A).

[99] They fall under the, "other appropriate requirement of State law set forth in such certification" requirement of 33 USC 1341(d); CWA §401(d).

[100] Antidegradation Implementation for Water Quality Protection in South Carolina. Department of Health and Environmental Control, Bureau of Water. July 1998. http://www.scdhec.net/environment/water/docs/antideg.pdf

For more information on water quality standards see the *National Guidance on Water Quality Standards for Wetlands*[101], the *Water Quality Standards Handbook*[102], or Section II of the April 1998 Advance Notice of Proposed Rule Making seeking comments from interested parties on possible revisions to the Water Quality Standards Regulation at 40 CFR Part 131.[103]

3. 401 Certification Considerations: Effluent Guidelines, New Source Performance Standards and Toxics

In addition to water quality standards, §401 certification decisions must reflect consistency with effluent guidelines, New Source Performance Standards (NSPS), the CWA's toxics provisions, and other considerations.[104]

Effluent guidelines are national technology-based effluent limitations for the discharge of pollutants directly to surface waters and to publicly owned treatment works (POTWs).[105] Effluent guidelines are developed for a wide range of specific industrial sectors and discharges -- from manufacturing to agricultural and service industries. As of 2010, effluent guidelines have been issued for 55 industry sectors and subsectors.[106] National effluent guideline regulations typically specify maximum daily allowable concentration and a 30-day average for a pollutant that may be discharged by facilities within the targeted industry, often per unit of production.[107] Regardless of the quality of the receiving water, all permits must include effluent limitations at least as stringent as those called for under the effluent guidelines.[108] While effluent guidelines serve as a national minimum of pollution control, the CWA requires permitting authorities to develop more stringent water quality-based standards if the effluent guideline requirements are insufficient to meet water quality standards on a particular water body.[109]

NSPS are technology-based discharge limits placed on new facilities. They are developed similarly to effluent guidelines, tailored to specific industrial sectors, and applicable nationwide regardless of the quality of the receiving water.[110] As a general rule, NSPS are more stringent than effluent limitations guidelines placed on existing sources in the same industrial sector.

4. 401 Certification Considerations: Consistency With Other Appropriate Requirements of State and Tribal Law

---

[101] National Guidance: Water Quality Standards for Wetlands. US EPA. July 1990. pvii. as Appendix B to Chapter 2 - General Program Guidance of the Water Quality Standards Handbook, December, 1983.
[102] Water Quality Standards Handbook, Second Edition. US EPA. September 1993.
[103] Found on EPA's website at http://www.epa.gov/waterscience/standards/laws.htm; Federal Register: July 7, 1998 (Volume 63, Number 129), Page 36741-36806, From the Federal Register Online via GPO Access, wais.access.gpo.gov, DOCID:fr07jy98-27.
[104] CWA §404(a)(1);.33 USC 1341(a)(1).
[105] CWA §304(b); 33 USC 1314(b).
[106] *See* CWA section 307(b) and (c); and CWA section 402(a) (1); EPA's Industrial Limitations Guidelines http://www.epa.gov/waterscience/guide/industry.html.
[107] CWA section 307(b) and (c); and CWA section 402(a) (1); 40 CFR §425.01-§620 (effluent guidelines).
[108] Exceptions to this statement include where a facility is eligible for a variance from the effluent guideline limitation, such as under the Fundamentally Different Factors (FDF) variance, CWA §301(n), 33 §USC 1311(n). Similar variances from effluent guidelines can be found at CWA § 301, 33 USC §1311. For a general discussion *see:* Water Quality Standards Handbook. Second Edition. US EPA. August 1994. Chapter7.6.3.
[109] CWA §301(b)(1)(C), §303(e)(3)(A); 33 USC 131(b)(1)(C), 1313(e)(3)(A); 40 CFR 122.44(d). Effluent guidelines may be insufficient to meet water quality standards in a number of circumstances, such as where a particular waterbody receives discharges from numerous facilities, or flows are low during some times of the year.
[110] CWA §306(b)(1)(B); 33 USC 1316(b)(1)(B).

Water quality certifications under §401 reflect not only that the licensed or permitted activity and discharge will be consistent with the specific CWA provisions identified in sections 401(a) and (d), but also with "any other appropriate requirements of State [and Tribal] law."[111] Some State regulations explicitly identify considerations relevant for §401 certification, while others do not. For example, Ohio's regulations state that certification may be denied if the activity will "result in adverse long or short term impact on water quality."[112] Similarly, river designation under the Wild and Scenic Rivers Act might be a relevant consideration independent of a state or tribe's water quality standards.[113] For example, Georgia considers a suite of other state regulations under its review including compliance with the state Erosion and Sedimentation Act for buffer integrity, construction and post-construction stormwater management, and the adequacy of mitigation. In addition, the Georgia water quality certification authority also coordinates with the Coastal Resources Division to insure project compliance with coastal protection regulations. Another relevant consideration when determining if granting 401 certification would be appropriate is the existence of state or tribal laws protecting threatened and endangered species, particularly where the species plays a role in maintaining water quality or if their presence is an aspect of a designated use. Also relevant may be other state and tribal wildlife laws addressing habitat characteristics necessary for species identified in a waterbody's designated use.

Similar to the discussion in section *III.C.2. 401 Certification Consideration: Consistency with Water Quality Standards*, protection of the cultural or religious value of waters expressed in state or tribal law can also be relevant to a certification decision, even when not included as part of a water quality standard.[114]

D. Conditioning Federal Licenses and Permits Through §401 Certification

States and tribes frequently place conditions on their water quality certifications when such conditions are deemed necessary to ensure compliance with the identified CWA provisions and any other appropriate requirements of state or tribal laws.[115] These §401 certification conditions must be included in the resulting federal permit or license.[116]

Many state and tribal governments use §401 certification as one of their primary regulatory tools for protecting water quality.[117] Some states frequently grant §401 certification unconditionally, while other states have a set of basic conditions involving Best Management Practices (BMPs) that are attached to most permits or licenses.[118]

---

[111] CWA §404(d);.33 USC §1341(d).
[112] OH ADC 3745-32-05 (B).
[113] 16 USC §1271.
[114] Ceremonial use standards were upheld by the 10th Circuit Court of Appeals in *Albuquerque v. Browner*, 97 F.3d. 415, 423 (1996).
[115] CWA §401(d);.33 USC 1341(d).
[116] CWA §401(d); 33 USC 1341(d). *See also, e.g., American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 107 (2nd Cir 1997); *Department of Interior v. FERC*, 129 P.U.R.4th 632, 952 F.2d 548 (DC Cir 1992).
[117] *State Wetland Program Evaluation*: Phase I, Environmental Law Institute, 2005; *State Wetland Program Evaluation*: Phase II, Environmental Law Institute, 2006.
[118] *State Wetland Program Evaluation*: Phase I, Environmental Law Institute, 2005; *State Wetland Program Evaluation*: Phase II, Environmental Law Institute, 2006.

In addition to CWA-derived requirements, §401 certification conditions may be based on "any other appropriate requirement of State [or Tribal] law set forth in such certification."[119] The ability to condition §401 certifications has been used by states and tribes to ensure that water quality has been comprehensively addressed in the design and implementation of projects and that unavoidable impacts will be mitigated. For example, North Carolina regulators believe that the mitigation demanded in their §401 certification conditions, specifically the requirement for at least 1:1 restoration or creation for wetland loss, allows the goal of No Net Loss of wetlands to be met at the state level.

As stated earlier, all conditions in a §401 certification must be included in any resulting federal permit or license, and the federal agency must incorporate the conditions without amendment.[120] The U.S. Supreme Court stated in 2006, "[i]t is still the case that, when a State has issued a certification covering a discharge that adds no pollutant, no federal agency will be deemed to have authority under NEPA to 'review' any limitations or the adequacy of the §401 certification."[121] The federal permitting agency does not have authority to review and amend the conditions on a §401 certification. All conditions must be included in the permit or license or the permit or license may not be issued.[122]

As discussed in the dispute resolution section below, federal courts have established that the state or tribal court system is the proper forum to review the substance of certification decisions[123], including the consistency of the conditions with CWA §401 and state or tribal water quality goals.[124] It is advisable that conditions placed on a §401 certification include a reference to the law or regulation that was the impetus for that condition.[125]

1. Appropriate Conditions

Section 401 provides that:

> Any certification provided under this section [401] shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with [enumerated provisions of the CWA]... and with any other appropriate requirement of State law set forth in such certification.[126]

---

[119] CWA §401(d);.33 USC 1341(d).

[120] *American Rivers, Inc. v. FERC.*, 129 F.3d 99, 107 (2nd Cir 1997).

[121] *S. D. Warren Co. v. Maine Board of Environmental Protection et al,* 547 U.S. 370, 126 S.Ct. 1843 (2006); Also supported by, *Calvert Cliffs' Coordinating Committee, Inc. v. United States Atomic Energy Commission*, 449 F.2d 1109, 1125 (DC Cir. 1971).

[122] CWA §401(d); 33 USC 1341(d). *American Rivers* at 110-111.

[123] The Supreme Court has at least implied that a remedy may be had in federal court, at least with respect to certifications involving FERC hydro licenses. In *Jefferson County PUD*, 511 U.S. 700 (1994), the Court stated that "[i]f FERC issues a license containing a stream flow condition with which petitioners disagree, they may pursue judicial remedies at that time." Since appeals of FERC licensing orders may be had only in the federal courts of appeals, this statement implies – perhaps confusingly – that the federal courts may examine the merits of conditions contained in a water quality certification in the context of reviewing a FERC order.

[124] *US v. Marathon Development Corporation*, 867 F.2d 96, 102 (1st Cir. 1989); *Roosevelt Campobello International Park Commission v. EPA,* 684 F.2d 1041, 1056 (1st Cir 1982); *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 112 (2nd Cir 1997); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

[125] *See e.g.*, 40 CFR 124.53(e)(2).

[126] 33 USC 1341(d); CWA §401(d).

Accordingly, a state or tribal certification should incorporate those conditions necessary to ensure a resulting federal license or permit will include effluent limitations at least as stringent as the applicable national technology-based guidelines established under the CWA, and as stringent as needed to attain and maintain water quality standards, including their designated uses and criteria. Under CWA §401(d) the water quality concerns to consider, and the range of potential conditions available to address those concerns, extend to any provision of state or tribal law relating to the aquatic resource.

The U.S. Supreme Court ruled in *PUD v. Washington Department of Ecology*. that:
"Section 401, however, also contains subsection (d), which expands the State's authority to impose conditions on the certification of a project. Section 401(d) provides that any certification shall set forth "any effluent limitations and other limitations ... necessary to assure that *any applicant*" will comply with various provisions of the Act and appropriate state law requirements. 33 U.S.C. § 1341(d) (emphasis added). The language of this subsection contradicts petitioners' claim that the State may only impose water quality limitations specifically tied to a "discharge." The text refers to the compliance of the applicant, not the discharge. Section 401(d) thus allows the State to impose "other limitations" on the project in general to assure compliance with various provisions of the Clean Water Act and with "any other appropriate requirement of State law." Although the dissent asserts that this interpretation of § 401(d) renders § 401(a)(1) superfluous, *post*, at 1916, we see no such anomaly. Section 401(a)(1) identifies the category of activities subject to certification--namely, those with discharges. And § 401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied."[130]

Considerations can be quite broad so long as they relate to water quality. The U.S. Supreme Court has stated that, once the threshold of a discharge is reached (necessary for §401 certification to be applicable), the conditions and limitations included in the certification may address the permitted activity as a whole.[127] Certification may address concerns related to the integrity of the aquatic resource and need not be specifically tied to a discharge. As the Supreme Court pointed out, "§401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied."[128] For example, the Supreme Court upheld the imposition of minimum stream flows to support spawning salmon in the certification of a proposed hydroelectric dam in Washington State.[129]

2. Role of Monitoring and Mitigation

Conditions accompanying §401 certifications may include monitoring requirements and compensatory mitigation if a state or tribe believes them necessary to comply with the CWA or appropriate requirements of state or tribal laws.[131] Several states have included monitoring and reporting requirements as §401 conditions.[132] Such requirements help the state determine whether water quality is being degraded. In addition, monitoring and reporting requirements allow agencies to assess the effect of operational practices and conditions on water quality in order to shape the development of certification decisions and conditions in the future. As an

[127] *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 712 (1994).
[128] *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 712 (1994).
[129] *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 712 (1994).
[130] *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 711-12 (1994).
[131] CWA §401(d), 33 USC 1341(d).
[132] Missouri, Confederated Tribes of the Warm Springs Reservation, and North Carolina, among others.

added benefit, monitoring and reporting helps applicants see and understand the impact, or averted impact, on water quality of their permitted actions. Monitoring and reporting helps to educate the regulated community about their impact on water quality and is essential for institutional learning to guide future certification decisions.

Mitigation requirements are often included in certification conditions to set the location, type, and extent of mitigation already required for a §404 dredge and fill permit or other permits. Although state and tribal certification regulations and conditions can require mitigation for any federal permit or license, mitigation is most commonly associated with CWA §404, under which EPA and the Corps follows the mitigation framework set out in the §404(b)(1) guidelines to evaluate applications for §404 dredge and fill permits. Missouri developed mitigation guidelines which regulators have implemented through CWA 401 certifications to increase the mitigation obtained from Corps permits. Some states have also elected to require mitigation in certifications for federal permits and licenses other than under §404, such as for FERC licenses. When mitigation is required for any permit or license, the state or tribe considers whether sufficient assurances should be incorporated into the certification to ensure the long-term functional success of the project. In North Carolina, for example, mitigation projects must be permanently protected by conservation easements or other similar protections.[133]

3. State and Tribal Laws and Certification Conditions

State and tribal laws pertaining to water quality are used to guide decision making in the §401 certification process. As discussed above, conditions are developed to ensure compliance with the CWA or other appropriate requirements of state or tribal laws. State or tribal water quality standards, developed under the CWA and approved by EPA, are often the initial standard considered by states and tribes when drafting conditions. Also relevant is any state or tribal law establishing a more stringent standard or goal for water quality. Applicable state and tribal laws may establish quantitative standards, or narrative criteria that set qualitative goals. For example, Virginia has established a "No Net Loss" of wetland acreage and function goal in statute[134] and the state often relies on it when certifying wetlands projects to require avoidance, minimization, and - when necessary - mitigation measures.

Some states have laws that limit their agencies' abilities to impose environmental requirements more stringent than those imposed by federal law, commonly referred to as "No More Stringent" laws. Section 401 certification programs in states with any type of restriction may wish to develop a process that ensures compatibility between their §401 certification and the limitation on stringency. Texas law prevents the state from permitting the discharge of dredged or fill material into waters of the state, but does not limit the state's role in the 401 water quality certification process.[135] However, budget constraints led to a reduction in the resources available for the state's 401 certification review activities. In response, the state developed a two-tiered system of review under a Memorandum of Agreement with the Corps. For projects under the impact thresholds identified as Tier 1, water quality certification is essentially waived by the state if the applicant self-selects one Best Management Practice (BMP) from each of three

[133] N.C. Division of Water Quality, Wetlands/401 Unit, Project Specific Condition List, July 2004 (Version 2). 18 pages; For more information on federal regulation, guidance and research on the use and performance of mitigation under the CWA and the Rivers and Harbors Act visit the http://www.epa.gov/wetlandsmitigation/.

[134] Code of Virginia § 62.1-44.15:21; Explained in regulation as "no net loss of wetland acreage and functions or stream functions and water quality benefits" 9VAC25-210-80.B.1(k)(5).

[135] Texas Water Code Title 2. Subtitle D. Chapter 26. Section 26.027(d).

classes to become conditions on their Corps permit.[136] While Texas does not individually review Tier 1 projects, it does develop the BMP options and requirements applicants must follow. Tier 2 projects receive individual state §401 water quality certification review.

E. Certification Process

CWA section 401 indicates that an applicant for a federal permit or license must include as part of the application for the federal permit a 401 certification or waiver[137], implying that federal agencies would not evaluate an application for a permit or license until the §401 certification decision is made. In practice, states and tribes frequently review certification requests while the federal permitting or licensing agency is reviewing the project application.[138]

1. Regulations Describing §401 Certification

Although regulations or guidelines on implementation of §401 are not required under the CWA, establishing a procedure by which certification decisions are made, and clarifying what information will be used to make those decisions, helps educate and inform applicants and the public about the CWA 401 process and the importance of water quality protection. State and Federal Section 401 certification regulations and guidelines vary in their detail. Some define the specific quantitative and qualitative limitations or standards used to assess aquatic resource impacts, while others merely note where applications for §401 certification should be sent.

States that have developed implementation guidelines for making §401 certification decisions have found them very useful in helping to ensure the project applicant, agency staff, and the general public understand the §401 process and requirements. Some state and tribal laws and regulations define specific elements of the §401 certification process. For example, a particularly important component of the 401 process is a state or tribal definition of what constitutes a complete application. Because the timeframe for 401 certification review starts upon receipt of a complete application[139], inadvertent waiver due to passage of time is less likely where the standard for a complete application is well-defined.

California has defined a complete application as, "an application that includes all information and items and the fee deposit required." California's regulations identify a detailed list of required application information including: full contact information of applicant; technical description of full activity through the final stage; identification of all federal permits or licenses being sought and all supporting information and correspondence produced for those permits or license(s) both draft and final; the correct certification fee; and a complete project description.[140] The California regulation goes on to clarify that a complete project description identifies receiving waterbody(ies) and impacts, location, mitigation, all avoidance and minimization

---

[136] Memorandum of Agreement Between the U.S. Army Corps of Engineers and the Texas Natural Resource Conservation Commission on Section 401 Certification Procedures, August 17, 2000.

[137] CWA §401(a)(1); .33 USC §1341(a)(1).

[138] An example of how the process in practice is not always as linear as the CWA suggests is FERC's licensing regulations. Under those regulations, once the Commission determines that the application is complete, it issues a "Ready for Environmental Analysis" notice instructing the license applicant to request water quality certification from the state certifying agency within 60 days of notice issuance.

[139] The Fourth Circuit observed that certification agencies prescribe the required procedure for requesting certification and starting the review or waiver countdown. *City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1109, 1112 (4th Cir 1989).

[140] CACR Title 23. Division 3. Chapter 28. Article 4. § 3856. Contents of a Complete Application.

efforts, and a brief list with the estimated adverse impacts of all projects implemented by the applicant within the last five years (or planned for implementation within the next five years) that are in any way related to the proposed activity or receiving water body(ies).[141]

The state of North Carolina's administrative code identifies the information required in an application for §401 certification, including maps and a description of the receiving waters, the discharge, the activity, and the applicant. In addition, North Carolina regulations reserve the right to request additional information and conduct on site investigations as deemed necessary by North Carolina Department of Environmental Health and Natural Resources.[142]

State implementation guidelines may be codified in statute or regulations, or described in guidance. A description of the §401 certification implementation process typically addresses standard operating procedures (SOPs) and the scope of review in terms of applicable state provisions, effects over the lifetime of the project, and certifying the operation of the facility in the construction certification. In addition, maintaining a list of all of the laws, regulations, and guidance documents referenced during §401 review can help ensure consistent application of standing policies.

2. Certification Practices Viewed as Effective by States or Tribes

Certification practices vary across States and Tribes. Some states have explicit procedures calling for comprehensive documentation of the rationale used to make certification decisions, while others adopt a less formal approach. In general, several states have found that providing comprehensive and detailed information in certifications and guidance on the certification review process and standards of review allows 401 certification to serve as an effective water quality protection tool while minimizing administrative costs and maximizing public transparency.

a. Substance of Certifications

Although not all federal licenses and permits reviewed under §401 will warrant conditioning, §401 certification is an important (and, sometimes, the only) regulatory opportunity to address water quality in draft federal permits and licenses. Therefore, when necessary, states and tribes should seek to include conditions that protect against the full range of reasonably possible impacts.

Conditions placed on §401 certifications should be as specific as necessary to ensure that water quality will be protected. Conditions that enumerate "how" to address "what" potential adverse effect from "where" help all parties understand what is being called for. As a result, conditions that are specific are more likely to be consistent with water quality standards and protect aquatic resources in accordance with the water quality goals of the state or tribe. For example, where protection of sensitive fisheries is a concern, some states and tribes have found it helpful to specify minimum flow volumes or regimes and stocking practices including species, size class, number, frequency and location.

In some circumstances, the provisions states or tribes would wish to see reflected in the permit or license can be achieved through early discussions with the applicants, rather than through formally conditioning the 401 certification. Some states such as North Carolina and

[141] CACR Title 23. Division 3. Chapter 28. Article 4. § 3856. Contents of a Complete Application.
[142] 15A NC ADC 2H.0502.

Oregon use the comment period when project proponents are developing their applications for Corps and state permits to give applicants the chance to include in the project description the changes that are likely to be required anyway. The use of Best Management Practices (BMPs) and practices needed for Total Maximum Daily Load (TMDL) implementation are often added to projects during this stage. BMPs can include such actions as using constructed wetlands or bioretention areas rather than retention ponds for catching nutrients and sediments. A related action often recommended in Kansas is the creation of a lake protection plan for developments around old watershed dams that were previously used for flood control and agriculture.[143] The lake protection plans emphasize BMPs around the lake and informs the residents that discharges from the water body that cause water quality exceedences downstream may result in violations and enforcement actions. In addition, Kansas has developed a coordination group of most of the state and federal natural resource agencies that meets quarterly and shares information on BMPs, TMDLs, water quality standards, federal and state regulations including mitigation regulations, relevant literature references and similar resources useful to §401 and other programs. The group also works to coordinate technical assistance for permittees (of various programs) needing help understanding and implementing their permit requirements or state expectations.

In addition to carefully crafted and detailed conditions placed on the original permit, re-opener provisions and deed notifications have been used where the state or tribal certifying agency anticipates changes in water quality standards or other considerations. Section 401 certification conditions that call for interaction with the state or tribe when a specified action or condition occurs are often called 'adaptive management" conditions and may help to ensure that water quality goals are met under changing conditions. In the context of hydropower licensing adaptive management is a process in which the licensee and stakeholders collaborate on "fine tuning" required environmental measures within a Commission prescribed range. For example, in response to a 401 certification adaptive management condition, FERC may require in a license a minimum flow between 100 and 500 cubic feet per second to protect a particular resource and within that range of flow the licensee and certifying agency make flow decisions on a reoccurring basis depending on the conditions occurring at the time. Some states have included an adaptive management condition in their 401 certification for FERC hydroelectric licenses that require facility operators to get review and approval of a dredging management plan prior to dredging operations associated with the dam. Adaptive management in general helps to anticipate and address potential future changes in the circumstances used as the basis for the 401 certification decisions. For example, Oregon regularly includes re-opener clauses when certifying Corps permits and under state law may modify the certification, with public comment, if water quality standards change.[144]

Another approach to extend the effect of 401 certification conditions is to require deed notifications to be placed on the land title for all remaining jurisdictional waters (and buffers where applicable). This helps to alert future land owners to permit requirements. As noted in section *III.C.1. Basis for Certification Decisions – Generally* above, North Carolina maintains a list of issues, evaluation tools and standard conditions including re-opener and deed notification provisions that are reviewed during every §401 certification evaluation.[145] In fact, North Carolina

[143] In Kansas this is common for old impoundments.
[144] Oregon Administrative Rules 340-048-0050.
[145] N.C. Division of Water Quality, Wetlands/401 Unit, Project Specific Condition List, July 2004 (Version 2). 18 pages.

includes a re-opener clause on almost all certifications issued. North Carolina §401 staff have also noted several applicants who indicated they saw the deed notification and realized they needed a certification.

b. Procedures used to Minimize the Administrative Burden of Certification

Many states and tribes have adopted procedures that minimize administrative burden by merging their 401 certification application and public notice process with those of the federal licensing or permitting agency. For example, many states and tribes have established joint applications and public notice arrangements with Corps Districts for CWA §404 permits and RHA §9 and §10 permits. Joint procedures help to ensure that all available project information is provided to all parties while simplifying the administrative requirements for applicants. Such procedures ensure that public comments on a project are collected at one time and provided to all relevant agencies. A number of states and tribes use the notice date as the start of the countdown to automatic waiver of certification, provided that they have received a complete application, which can be defined by the state or tribe.[146] A particular benefit of joint application and public notice requirements is that they help improve communication and coordination between the state and tribal agencies and the federal agencies while establishing a standard information requirement for both applications.

Close coordination with the federal permitting or licensing authority can provide certification agencies with valuable access to the applicant prior to the official request for certification. Several states, including Oregon, Georgia, Montana and Kansas, rely heavily on the pre-application consultation process to provide an opportunity to discuss potential water quality concerns and obtain changes to the proposed project prior to official application for a permit or license and certification. Kansas uses pre-application meetings for a variety of purposes. Along with the standard information gathering and dissemination function, Kansas also attempts to use pre-application meetings to discuss low-impact and smart growth design features with the applicant and other agencies involved. In addition, Kansas focuses on communication within affected watersheds to ensure that proposed projects will not disrupt other permitted activities in the watershed such as Public Water Supplies, Waste Water Treatment Plants and other permittees. Kansas has found that assessing a project in regard to the existing impacts and uses of the watershed is especially important when considering changes to channel morphology and other baseline conditions upon which other permittees or users rely. Montana uses pre-application meetings to discuss and distribute copies of their water quality standards, a stormwater / erosion control handbook, and information pertinent to other permits the applicant might need relative to other permitting authorities. Georgia works to have projects 'modified to address concerns' during the application process, so that the main water quality issues are addressed prior to final certification. Oregon provides information to the applicant on BMPs and fact sheets about water quality, including *Stormwater Management Plan Submission Guidelines for Removal/Fill Permit Applications Which Involve Impervious Surfaces.*[147]

---

[146] *See e.g., City of Fredericksburg v. Federal Energy Regulatory Commission*, 876 F.2d 1111-1112 (4th Cir 1989). When invalidating a FERC license issued without a 401 certification, the Fourth Circuit referenced FERC's regulations (18 C.F.R. § 4.38(c)(2)) requiring water quality certification requests be made in compliance with state law. In this instance Virginia's application requirements for 401 certification defined a complete application.

[147] Oregon Department of Environmental Quality, Stormwater Management Plan Submission Guidelines for Removal/Fill Permit Applications Which Involve Impervious Surfaces. (2005).

Certification review can also take many forms within a state or tribal government. Some jurisdictions conduct certification review through one office for all projects (e.g. North Carolina, Nebraska, Georgia, Confederated Salish and Kootenai Tribes of the Flathead Reservation, and Pueblo of Sandia). Alternatively, other jurisdictions separate certification review into project type such as FERC license or Corps permit (e.g. Oregon or Montana). In addition, certification review may be a state or tribe's only regulatory look at a project affecting water quality or it may run parallel to review for other state or tribal permits.

U.S. v. Marathon Development Corporation:

"Neither the language nor the history of section 404(e) of the Clean Water Act ('General permits [for dredged or fill material] on State, regional, or nationwide basis'), 33 U.S.C. § 1344(e), suggests that states have any less authority in respect to general permits than they have in respect to individual permits."[148]

As discussed more fully in the *Resolution of §401 Certification Related Disputes* section below, conditions on a federal permit or license are reviewable in state or tribal courts for consistency with water quality standards and other relevant laws. Certification practices discussed above, such as implementation procedures and evaluation criteria, will help to ensure the documentation of the §401 certification decision is thorough, making internal agency and even external legal review of a 401 certification decision easier.

F. Issues Raised by General Permits, After-the-Fact Permits, and Provisional Permits

The Clean Water Act authorizes general permits for activities that do not have significant environmental impacts either individually or cumulatively.[149] General Permits allow projects of a specifically defined type of impact or activity to proceed with limited or no individualized review. Some general permits require only notification to the Federal agency issuing the permit about a proposed project; others do not even require notification. General permits may be developed at and apply to a national or a smaller regional geographic scale. General permits are widely used in the Section 402 NPDES and section 404 permit programs.

A general permit may result in a discharge from a point source into a water of the United States, and as such is subject to the same §401 water quality certification requirements as individual permits, but at the point it is being initially issued and not as it is applied to particular projects. When a state or tribal agency is considering whether to provide §401 certification for a proposed general permit, the agency has the same options as it would for an individual permit or license —grant, deny, condition or waive.[150] Nationwide and Regional General Permits issued by the Army Corps of Engineers under CWA §404 are certified at the issuance and re-issuance of the general permit.

When certification is denied for a Nationwide or Regional General Permit, the District offices of the Army Corps of Engineers have responded primarily in two ways. In some instances Districts allow projects to be covered by a general permit provided the project proponent first

[148] *US v. Marathon Development Corporation*, 867 F.2d 96, 100 (1st Cir. 1989).
[149] *See, e.g.*, CWA §404(e); 33 USC 1344(e); 33 CFR § 330.1(b), 40 CFR §122.28(b)(2).
[150] Demonstrated in general practice nationwide and supported in the 1st Circuit Court of Appeals; *US v. Marathon Development Corporation*, 867 F.2d 96, 100 (1st Cir. 1989).

obtains §401 certification from the state or tribe, for a specific project to be covered by the general permit. The Corps often will issue a provisional authorization that only becomes effective when accompanied by a §401 water quality certification. In other cases, the certifying agency has worked with District to develop a more acceptable General Permit for which the state can provide a certification, that would not need additional certification review when specific projects are covered. When a state or tribe imposes conditions on a Nationwide or Regional General Permit, often the Corps District offices have responded by incorporating the conditions into a state- or tribe-specific version of the Nationwide Permit, or by requiring an individual §401 certification in order to qualify for the General Permit.

EPA-issued CWA §402 general permits are also reviewed by states and tribes under CWA §401. When a state or tribe denies certification the general permit is issued by the Regional Administrator with the notation that the following permit is not valid for that state or tribe's jurisdiction. In addition, if the state or tribe grants certification but imposes conditions on an EPA issued general permit, the conditions are attached to the general permit for application in that area.

If certification has been waived or granted for a general permit, any applicant approved to make use of that general permit faces no further certification review.[151]

Under limited circumstances, agencies have issued permits authorizing a discharge after a discharge has commenced. For example, after-the-fact permits are sometimes issued under CWA §404 for discharge of dredged or fill material into waters of the U.S. A state or tribe's §401 certification considerations for these after-the-fact permits should be conducted in the same manner as for normal pre-discharge permit applications. The burden of proof remains on the applicant to show that the requirements of the CWA have not been and will not be violated as a result of the activity.

Even in the case of after-the-fact permits, the state or tribe has the option of granting, denying, conditioning or waiving certification. If the applicant fails to adequately demonstrate that the fill activity did not and will not violate the CWA sections enumerated in §401 or any appropriate requirement of state or tribal law, certification should be denied. If certification is denied on an after-the-fact permit, the Corps may not issue a permit

[151] Further certification review may be applicable as outlined in the certification conditions (if present) or under §401(a)(3) or (a)(4) .

***American Rivers v. FERC*:**

"First, applicants for state certification may challenge in courts of appropriate jurisdiction any state-imposed condition that exceeds a state's authority under §401. In so doing, licensees will surely protect themselves against state-imposed *ultra vires* conditions. Second, even assuming that certification applicants will not always challenge *ultra vires* state conditions, the Commission may protect its mandate by refusing to issue a license which, as conditioned, conflicts with the F[ederal]P[ower]A[ct]. In so doing, the Commission will not only protect its mandate but also signal to states and licensees the limits of its tolerance."[152]

In some cases the permitting or licensing authority will issue a provisional authorization that only becomes effective when accompanied by a water quality certification. If certification is waived through the passage of time the applicant may then return to the permitting or licensing authority for a final authorization. If a certification is denied, the provisional authorization never becomes valid, and if certification is granted with conditions the provisional authorization is restricted by those conditions (with or without further modification by the permitting or licensing authority). Provisional authorizations are common in the context of Nationwide or Regional General Permits under CWA §404.

G. Resolution of §401 Certification-Related Disputes

Applicants or others who disagree with the 401 certification, including its conditions, may seek to have the decision reviewed and overturned. Complaints to the federal permitting or licensing agency are unlikely to be effective, since the agencies do not have authority to modify or overturn the state 401 certification. The initial forum for appealing a decision to grant, condition, or deny certification is often a state or tribe's courts or administrative appeals process for which the details are likely to vary among states and tribes. Some jurisdictions have an administrative appeals process that needs to be exhausted prior to proceeding to state or tribal court, while other jurisdictions do not.

Legal Review for §401 Certification

State or Tribal Courts

- Certification decision consistent with water quality standards; other enumerated CWA provisions; and appropriate provisions of state or tribal law

Federal Courts

- Timeframe for automatic waiver of certification
- Re-certification needed due to changes in circumstances outlined in §401(a)(3)
- Whether threshold conditions required for 401 certification to apply are met (i.e., federal permit or license, discharge, water of the U.S.)

Figure 5. Courts of Review for §401 Certifications

If a permit applicant wishes to challenge conditions included in a certification, the "only recourse is to challenge the state certification in state judicial proceedings."[153] State or tribal

[152] *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 112 (2nd Cir 1997).
[153] *US v. Marathon Development Corporation*, 867 F.2d 96, 102 (1st Cir. 1989); *Roosevelt Campobello International Park Commission v. EPA*, 684 F.2d 1041, 1056 (1st Cir 1982); *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 112 (2nd Cir 1997); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

courts review §401 certification conditions for consistency with state or tribal water quality standards and other provisions of the state judicial proceedings."[154] Review is typically limited to the question of whether the certifying agency's decision is supported by the record and is consistent with applicable law (states and tribes often have a standard for administrative behavior similar to the arbitrary or capricious standard established for federal administrative actions).[155]

Some issues regarding the §401 certification may be heard in federal administrative proceedings and courts.[156] For example, the federal permitting or licensing authority may review the procedural requirements of §401 certification, including whether the proper state or tribe has certified, whether the state or tribe complied with applicable public notice requirements, and whether the certification decision was timely.[157] In instances where federal permits were issued without the required §401 certification or certification conditions have not been enforced, the courts have found challenges under the citizen suit provisions of the CWA permissible on procedural grounds.[158]

H. Enforcement of §401 Certifications

Enforcement practices for §401 certification vary across the country. Many states and tribes assert they may enforce 401 certification conditions using their water quality standards authority. While authority may be available, states and tribes may face challenges due to programmatic funding and support to carry out enforcement actions. Federal agencies also have the authority to enforce 401 certification conditions once incorporated as conditions in their permit or license.

401 certification conditions may be enforced by a variety of parties. The federal issuing agency may enforce the §401 certification conditions placed on permits or licenses as a mandatory requirement of the permit or license.[159] As discussed above, states and tribes assert they may enforce §401 certification conditions directly. In addition, the general public potentially may enforce 401 certification conditions as well; the 9th Circuit Court of Appeals notes that "nothing in the language of the Clean Water Act, the legislative history, or the implementing regulations restricts citizens from enforcing the same conditions of a certificate or permit that a State may enforce."[160]

A challenge with enforcement of 401 certification conditions arises from the fact that, as authors, the state or tribal certifying agency likely best understands what the condition requires

---

[154] *US v. Marathon Development Corporation*, 867 F.2d 96, 102 (1st Cir. 1989); *Roosevelt Campobello International Park Commission v. EPA*, 684 F.2d 1041, 1056 (1st Cir 1982); *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 112 (2nd Cir 1997); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

[155] *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 112 (2nd Cir 1997).

[156] *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 107, 111-112 (2nd Cir 1997); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 867 (9th Cir 1993)

[157] *American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 99, 110-111 (2nd Cir 1997); *City of Tacoma v. FERC*, 460 F.3d 53, 68 (D.C. Cir. 2006).

[158] *Oregon Natural Desert Association v. Michael P. Dombeck*, 151 F.3d 945, 2 (9th Cir.(Or.) 1998); *Northwest Environmental Advocates v. City of Portland*, 56 F.3d 979, 988 (9th Cir 1995).

[159] *See e.g., American Rivers Inc. v. Federal Energy Regulatory Commission*, 129 F.3d 108 (2nd Cir 1997) ("...§ 401(a)(5) of the CWA, 33 U.S.C. § 1341(a)(5), [FN20] which provides the licensing agency (in this case FERC) with authority to enforce the terms of a license--which pursuant to § 401(d) include a state's § 401 certification conditions--once such a federal license has issued.")

[160] *Northwest Environmental Advocates v. City of Portland*, 56 F.3d 979, 988 (9th Cir 1995).

even though the condition is reflected in a permit or license issued by a federal agency. As a result, some federal agencies are reluctant to enforce 401 certification-derived conditions in their permits. State approaches to 401 certification violations vary. In New Mexico the State will find violations and report them to the Corps for enforcement action. North Carolina enforces violations to their own water quality standards and certification conditions. In Kansas the Corps enforces based on any conditions of the permit that they have jurisdiction over and then hands over the information to state and local authorities for compliance with any independent requirements, and if it is a water quality issue specific to a water quality compliance then enforcement is left to the state. If a Montana Water Quality Act violation occurs related to noncompliance with a 401 Certification condition, Montana's certification program writes the first letter identifying the violation and what needs to be done to reach compliance. If no action is taken the matter is directed to the Department of Environmental Quality Enforcement Division for further action. The Confederated Salish and Kootenai Tribes conduct the initial investigations and the Water Quality Program reports to the Corps, who then works alongside the Tribe on compliance assistance and enforcement when needed.

States and tribes may establish enforcement regulations and programs specifically for §401 certification, or instead simply expand the jurisdiction of existing enforcement programs. The California Water Code establishes civil liability for any person who violates §401 and criminal penalties for any person who knowingly or negligently violates §401, with a penalty chart for each.[161]

I. Suspension of §401 Certifications

Once a federal permit or license is issued with the required §401 certification, the certification can only be changed under limited circumstances.[162] Certification "may be suspended or revoked by the federal agency…upon the entering of a judgment…that such facility or activity has been operated in violation of the applicable [CWA] provisions."[163] This statutory provision suggests that a certifying agency can not revoke or suspend a certification without the action of the federal permitting or licensing authority. In contrast, if a certified permit or license is modified by the applicant or the federal agency, the certification agency has an opportunity to change conditions, but only those affected by the permit or license modification.[164]

The federal permitting or licensing agency possesses very limited authority to review state or tribal water quality certifications to change final permit or license conditions after certification has been granted, even at the request of the certifying agency. If certification has already been granted for the construction of a facility and the certifying agency wants to either revise the certification of the construction or issue a new certification for the operation of the facility, the federal agency must assess whether the request for revision complies with §401(a)(3). The request for revision of a certification decision must be timely and in response to

[161] Porter-Cologne Water Quality Control Act. CAWC. Division 7. Chapter5.5. § 13385 Civil Liability. And § 13387 Criminal Penalties.
[162] *Caribbean Petroleum Corporation v. EPA*, 28 F.3d 232, 235 (1st Cir 1994).
[163] CWA §401(a)(5), 33 USC 1341(a)(5); These provisions include of section 301, 302, 303, 306, and 307.
[164] Under these circumstances the certification agency receives the entire permit for review, even though only the conditions subject to the modification are reopened. *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 867 (9th Cir 1993).

changed circumstances since the issuance of the original certification.[165] The authority to review a final certification decision or the substance of conditions has been reserved to the state or tribal court system (as discussed above in the *Resolution of §401 Certification-Related Disputes* section). If the requirements of §401 (a)(3) have not been met, the federal agency may still use the information and recommendations from the certification agency in formulation of the federal permit or license, but they are not bound to follow the advice of the certifying agency.[166]

[165] 33 USC 1341(a)(3); CWA §401(a)(3); *Keating v. FERC*, 927 F.2d 616, 621-622 (DC Cir 1991).
[166] 33 USC 1341(a)(3); CWA §401(a)(3); *Puerto Rico Sun Oil Company v. EPA*, 8 F.3d 73, 79 (1st Cir 1993); *Del Ackels v. United States Environmental Protection Agency*, 7 F.3d 862, 867 (9th Cir 1993).

IV. Leveraging Available Resources

A §401 certification program still needs funding and adequate resources to be implemented fully, even with a solid foundation in federal and state or tribal law and an exemplary staff. This section discusses some of the approaches that states and tribes have taken to leverage available funding, staffing, and data sources.

A. Funding and Permit Fees

States and authorized Tribes[167] vary greatly in their implementation of the program and also in their funding sources which include such diverse sources as general government funds, certification fees, federal grants, and State Departments of Transportation (DOT). Many, but not all, states and tribes augment program budgets with application fees for §401 certification.[168] States and Tribes establish the fee requirements, schedules and final allocation of the funds collected; practices vary across the country.

California Water Code §13160.1: Federal Certificate Fee

"The state board may establish a reasonable fee schedule to cover the costs incurred...but is not limited to including, the costs incurred in reviewing applications...prescribing terms...and monitoring requirements, enforcing and evaluating compliance...and monitoring requirements, conducting monitoring and modeling, analyzing laboratory samples, reviewing documents..., and administrative costs...The fee schedule may provide for payment of a single fee...or for periodic or annual fees..."[169]

Fees vary amongst states and tribes in at least two respects: revenues return either directly to the 401 certification program or to a general fund, and fees are either based on project size or a flat fee. The state of California's Regional Water Quality Control Boards requires filing fees for §401 certification and related state permits which includes a flat fee based on the activity and a rate per the volume or area of impact.[170] The fee structure allows for part of the cost of the §401 certification program to be recovered through appropriately set fees that are directed to the California Water Rights Fund.[171]

In contrast to California, some other states are authorized to charge 401 certification fees that are remitted back to the program. For example, fees for water quality certification in Ohio go back to the agency's surface water protection budget in accordance with Ohio Revised Code 3745-114 (C). There is a base fee of $200 plus a review fee which is determined by the

[167] Tribes authorized to use §401 certification authority have Treatment as State (TAS) authority, and typically have developed water quality standards and designated an agency to administer the certification authority, as further discussed in *II.B.1. States and Authorized Tribes* on page 9.
[168] The CWA is silent on administrative fees for 401 certification, neither encouraging nor discouraging their use. Potential use of fees is more dependent on state and tribal law and custom.
[169] Porter-Cologne Water Quality Control Act. CAWC. Division 7. Chapter 3. Article 4. § 13160.1. Federal certificate fee.
[170] Title 23, Division 3, Chapter 9, Article 1, Sections 2200, 2200.4, 2200.5 And 2200.6 of the California Code of Regulations, for fee calculator see http://www.waterboards.ca.gov/water_issues/programs/cwa401/.
[171] Porter-Cologne Water Quality Control Act. CAWC. Division 7. Chapter 3. Article 4. § 13160.1. Federal certificate fee.

magnitude of the impact and the funds go back into the agency budget.[172] Ohio's administrative code also establishes that the state can "require that the applicant perform various environmental quality tests," at any point, "prior to the issuance of the §401 water quality certification or prior to, during, or after the discharge of dredged or fill material."[173]

Missouri charges a flat fee of $75 for any certification request. In contrast, for certification of Corps permits Oregon fees have been based on the amount of removal or fill above set thresholds, unless activities are exempt from fees. Oregon bases application fees for hydroelectric projects on the theoretical horsepower of the proposed project and uses them for the certification program's base funding. In addition, each applicant for hydropower 401 certification must pay for DEQ's costs to review the application and make a decision; these costs are invoiced and are separate from the annual fee.[174]

North Carolina's permit fee for §401 certification is $240 for an impact less than 150 feet of stream or 1 acre of wetlands and $570 for larger impacts; any changes to or renewals of a certification require a new permit fee before processing will begin.[175] North Carolina also offers express permits, stormwater management plan review, and stream origin and perennial or intermittent determinations that are given priority and turned around twice as fast and cost roughly five times as much; permits and plan reviews starting at $1000 and stream determinations starting at $200 for 2 calls per property.[176] In Montana, certification fees are established in regulations as a minimum of $400.00, or 1% of the gross value of the proposed project, not to exceed $20,000.00.[177] Authority for certification fees in Montana is based in statutory authority granting ability to charge a fee sufficient to cover the direct and indirect costs of reviewing an application, conducting compliance inspections, monitoring water quality and preparing water quality rules or guidance documents, however in reality most projects eligible for certification in Montana are reviewed under state §318 authorities and assessed a $250 fee.[178] Many tribal certification programs do not charge any fee for water quality certification.

B. Staffing Sources

States and tribes vary in staff sizes. States with independent permitting authorities for the aquatic resources covered under §401 and additional waters of the state can have very large staffs and budgets. North Carolina has upwards of 40 people working on §401 certification and their permitting program for aquatic resources not covered under the CWA. In contrast, Nebraska has a staff of one-half a Full Time Equivalent (FTE) to address both 401 water quality

---

[172] Ohio Revised Code 3745-114: $500 per acre of wetland; $5 per linear foot or $200, whichever is greater, for ephemeral streams; $10 per linear foot or $200, whichever is greater, for intermittent streams; $15 per linear foot or $200, whichever is greater, for perennial streams; $3 per cubic yard of dredged or fill material for lakes.
[173] Ohio Revised Code 6111.
[174] Oregon Revised Statute §468.065, (2003).
[175] North Carolina Department of the Environment and Natural Resources, Wetlands/401 Certification Unit, 401Water Quality Certification Fee Memorandum, http://h2o.enr.state.nc.us/ncwetlands/fees.html (accessed 5/4/06).
[176] NC Division of Water Quality, Wetland Buffer Program Express Review Fees (2004), found at http://h2o.enr.state.nc.us/ncwetlands/express_review.htm.
[177] Administrative Rule of Montana 17.30.201(6).
[178] Administrative Rule of Montana 17.30.201(6).

certification for discharges into waters of the US and letters of opinion for impacts to waters that are only state waters.[179]

Some agencies that frequently request 401certification have found it helpful to fund a position in the certification agency dedicated to their project requests. This seems particularly common with State DOTs.[180] Since DOTs are frequent applicants for certification and often involve large complex projects with fragmented impacts that demand significant time and resources to evaluate, they are often very interested in helping speed up the certification review. North Carolina and Oregon have arranged for §401 certification program staff to be funded by their DOT under the conditions that the staff almost exclusively work on DOT projects (ensuring immediate attention and therefore a quicker review turnaround) but answer and report exclusively to the certification program management. In Oregon, the 401 staff for certification of non-hydroelectric projects consists of two to three positions, one of which is periodically DOT funded. In North Carolina the certification program staff is roughly 40 people of which 11 are funded by the DOT. North Carolina also gets funding from other state programs and EPA grants. However resource constraints are handled at the state and tribal agency, the following information may help program staff obtain data and technical resources more easily and perhaps expand the recuperative effect of permit fees.

C. Data Sources

Certification decisions are based on the potential impacts to water quality goals as specified in water quality standards, other CWA provisions identified in Section *III.C. Scope of Review For §401 Certification Decisions* above, and other appropriate water quality based state or tribal laws and regulations.[181] However, to support a 401 certification decision, the certifying agency may need additional information on the site, associated aquatic resources, or the effect of the potential impacts, than what may have been included in the application materials. The most relevant source of information to the §401 program is the water quality standards and the information used to develop them. Also helpful may be information used to develop or contained in a Total Maximum Daily Load (TMDL). In addition, other state and tribal departments and agencies such as those implementing the CWA §402 National Pollutant Discharge Elimination System program house information that could be applicable to the potential impacts associated with project proposals. Old certifications should also provide insight into not only the type and extent of information used in the past to assess similar projects but also potential sources of information on the resource, the potential impacts or the possible conditions that would mitigate the effects on water quality. Useful and important data may also be found outside the application and state government sources. For example, the professional community

[179] The letters of opinion identify that the project as proposed or with the listed changes / additions, likely will not violate title 117 Water Quality Standards, however these letters are not legally binding or directly enforceable.
[180] State DOTs and Port authorities also fund positions at in the US Army Corps of Engineers and other permitting agencies. However, no examples have been identified where private entities have funded state or tribal 401 certification positions.
[181] 33 USC 1341(d); CWA §401(d); *S. D. Warren Co. v. Maine Board of Environmental Protection et al,* 547 U.S. 370, 126 S.Ct. 1843 (2006);*Jefferson County PUD v. Washington Dept. of Ecology,* 511 U.S. 700, 711 (1994).

including the federal informational tools, professional societies, academic publications and trade journals contain copious amounts of information. But their usefulness is dependent on the extent to which the user can find the most salient information quickly.

1. The Applicant

Information provided by the applicant is the logical first resource to consult when evaluating a proposed project. Since time is often at a premium, the materials received from the applicant can not always be recreated by the certifying agency to ensure accuracy; therefore they must be trusted when verified against the best professional judgment of the staff and outside experts as needed. Several states and Corps Districts have developed lists of consultants and applicants who have established records of accurate submissions, which helps certifying agencies focus their verification efforts on less established or familiar applications and applicants. In some states such as Kansas, applicants must research other permitted impacts and uses in the watershed and alert them to the proposed project, helping to identify and address cumulative and cross project impacts in the watershed.

2. Other State, Tribal or Local Agencies

Other state, tribal and local agencies may also house relevant and valuable information for the certification process. Departments of Transportation conduct large studies of cumulative and secondary impacts to aquatic resources which can be a rich source of information on ways to analyze and address large projects with fragmented impacts. State natural resource inventories are often developed by the cooperative extension service and can provide detailed information on the natural resource base and conservation issues facing the region. Local governments may have developed watershed plans that could provide useful site specific data, many local watershed groups and monitoring efforts are registered through EPA's Adopt Your Watershed program and can be found by searching the website.[182] Similarly, looking at the activities and experiences of neighboring state and tribal water quality certification programs, and their analysis could provide valuable information.

State Natural heritage programs are a good place to find detailed information on aquatic resources, plants, animals, communities, land cover and land ownership. The Natural Heritage Programs focus on providing information on the status and distribution of native animals and plants, emphasizing species of concern and high quality habitats such as wetlands. Heritage specialists collect, verify, and disseminate information to a broad community of users for many applications including the listing and delisting of threatened and endangered species and the development of environmental assessments. In addition, NatureServe works with the network of state (and international) natural heritage programs to provide information about rare and endangered species and threatened ecosystems.[183] NatureServe collects and manages detailed local information on plants, animals, and ecosystems, and develops information products, data management tools, and conservation services. NatureServe's publications include an analysis of the biodiversity value of geographically isolated wetlands in all 50 states which may be a useful starting point for assessing the habitat value of potentially impacted wetland resources.[184]

3. Federal Information Tools

[182] http://cfpub.epa.gov/surf/locate/index.cfm
[183] http://www.natureserve.org/.
[184] http://www.natureserve.org/publications/isolatedwetlands.jsp.

Many federal programs and agencies develop, collect, disseminate and produce informational tools that could provide valuable information to a certification decision. When using databases that may be more historical than current, it is always important to verify that the data remains valid. The United States Geological Survey (USGS) studies and provides information on a variety of topics including biology, geography, hydrology, geology, regional studies, natural hazards, the environment, and wildlife and human health.[185] The National Wetlands Inventory (NWI) produces and provides information on the characteristics, extent, and status of the nation's wetlands and deepwater habitats and other wildlife habitats.[186] The national wetland plant list, status and trends reports, and other reports focusing on national, geographic or resource specific areas are also available from the NWI.

EPA's Watershed Assessment, Tracking and Environmental Results (WATERS) tool unites water quality information from several independent and unconnected databases and displays the information in maps and reports.[187] The EPA programs covered in WATERS are: water quality standards, water quality inventory (§305(b) report), total maximum daily load (TMDL – §303(d) list), water quality monitoring, NPDES permits, safe drinking water, fish consumption advisories, nonpoint source pollution, nutrient criteria, beach program and vessel sewage discharge. One of the tools in WATERS is the EPA's EnviroMapper which provides access to environmental information in a geographic format.

EnviroMapper can display various types of environmental information, including air releases, drinking water, toxic releases, hazardous wastes, water discharge permits, and Superfund sites. EnviroMapper includes: federal, state, and local information about environmental conditions and features, facility and chemical-based information from the Envirofacts Warehouse, information about surface water features and their environmental condition, the Superfund program's National Priorities List sites, results from environmental sampling and monitoring in the New York City area in the aftermath of the events of September 11, 2001, information on demographic characteristics, and areas served by Brownfields Grantees and select brownfield's properties. It combines interactive maps and aerial photography to locate, display and query brownfield grant types and properties addressed by cities, counties, states, and tribes.

The Natural Resource Conservation Service (NRCS) provides technical expertise in such areas as animal husbandry and clean water, ecological sciences, engineering, resource economics, and social sciences. In particular, the NRCS' expertise focuses on soil science and natural resource conditions and trends in the United States, represented in soil surveys and the National Resources Inventory.[188] Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources. The technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared and are referred to as Field Office Technical Guides (FOTGs). The electronic FOTGs (eFOTGs) include automated data bases, computer programs, and other electronic-based materials and are broken into five sections of information: general information, soil and site information, conservation management

[185] http://www.usgs.gov/science.html.
[186] http://www.nwi.fws.gov/.
[187] http://www.epa.gov/waters/about/index.html.
[188] http://www.nrcs.usda.gov/about/.

systems, practice standards, and specifications and conservation effects.[189] The NRCS also provides soil survey information through their online mapping tool the Web Soil Survey.[190] Because 401 certification decisions may require consideration of soil characteristics which can affect the aquatic resource impacts of a proposed project, such as stormwater runoff.

Surf Your Watershed is an EPA web based service that helps to locate, use, and share environmental information about states and watersheds. [191] Information is provided by 8 digit HUC (Hydrologic Unit Code) but can be accessed using stream name, state, city, zip code, tribe or county. Links to United States Census Bureau information and USGS data on stream flow, science, water use and selected abstracts are provided as well as information on the counties, American Heritage Rivers, National Estuary Programs, states, and watersheds upstream and downstream. Surf Your Watershed contains the following databases: Adopt Your Watershed, Wetlands Restoration Projects, American Heritage Rivers Service and SURF-Environmental Websites Database. Adopt Your Watershed is a database of watershed groups throughout the nation. You can search for a group in your area either by state, zip code, group name, keywords or even stream name. Wetlands Restoration Projects includes self reported information about ongoing wetlands projects organized by state and watershed. American Heritage Rivers Services is a multi-agency initiative to help communities find support for their rivers. The database offers a "yellow pages" directory of services to help communities revitalize their rivers environmentally, economically and culturally. SURF-Environmental Websites Database is a directory of websites dedicated to environmental issues and information. It is searchable by keywords, geography, organization, or even by the information medium.

The USGS' National Hydrography Dataset (NHD) is the underlying data maps for surf your watershed and many other geo-referenced programs however it can also be viewed independently of these other applications.[192] The NHD is a comprehensive set of digital spatial data that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells. Within the NHD, surface water features are combined to form "reaches," which provide the framework for linking water-related data to the NHD surface water drainage network. These linkages enable the analysis and display of water-related data in upstream and downstream order. The NHD Viewer provides direct access to the NHD through an interactive web viewer.[193] In addition to the NHD, the USGS also collects surface water data nationally at thousands of sites. The information varies from historical only to daily values or even real time measurements. The USGS also houses a repository of water quality measurements and assessments taken at surface water monitoring stations and independent locations. Both the surface water and water quality information is available through the USGS's National Water Information System (NWIS) website.[194]

EPA also hosts two data warehouses for water quality information, the Legacy Data Center (LDC), and STORET. The LDC is a static, archived database and STORET is an operational system actively being populated with water quality data. Both systems contain raw

---

[189] http://www.nrcs.usda.gov/technical/efotg/.
[190] http://websoilsurvey.nrcs.usda.gov/app/
[191] http://www.epa.gov/surf/.
[192] http://nhd.usgs.gov/.
[193] http://nhd.usgs.gov/data.html; or directly to the viewer at http://nhdgeo.usgs.gov/viewer.htm.
[194] Surface water monitoring: http://waterdata.usgs.gov/nwis/sw; Water quality monitoring: http://waterdata.usgs.gov/nwis/qw.

biological, chemical, and physical data on surface and ground water collected by federal, state and local agencies, Indian Tribes, volunteer groups, academics, and others. All 50 States, territories, and jurisdictions of the U.S. are represented in these systems. Both the LDC and STORET are web-enabled and available to the public.[195]

The Federal Emergency Management Agency (FEMA) publishes flood hazard zone maps which may also be useful in 401 certification assessments. The FEMA Flood Insurance Rate Maps (FIRMs) available online are identified as FIRMette and are free on the Map Service Center website.[196]

Note, the above geographic tools are not complete or definitive sources for location specific information. They have been developed using information reported by local, state and regional governments and non-governmental organizations. The presence or absence of information should be treated as informative but not a definitive indication of conditions on the ground.

4. Professional Societies and Private Sector Tools

In addition to state, tribal and federal programs and tools, private industry and professional organizations and their associated journals can provide very detailed information on individual aquatic resource types and impacts. The Society of Wetland Scientists (SWS)[197], American Water Resources Association (AWRA)[198], American Society of Limnology and Oceanography (ASLO)[199], American Fisheries Society (AFS)[200], American Society of Ichthyologists and Herpetologists[201], North American Benthological Society[202], and the American Ornithologists' Union[203] are a few such professional organizations that may provide access to valuable information for certification decisions and condition development. Non-profit organizations dedicated to watershed protection also produce many reports, technical guides, and often review and compare assessment methods focusing on everything from site design to watershed modeling and planning – one such organization is the Center for Watershed Protection[204] and specifically its Stormwater Manager's Resource Center.[205]

The number of internet mapping tools available to the public has grown dramatically in recent years and offers users various types of information and levels of detail. Google Earth and Microsoft's Bing are the most popular examples of desktop mapping tools that are novice user friendly, allow for some integration of information from independent sources, and provide satellite imagery.[206] For more advanced users Geographic Information System (GIS) platforms

---

[195] http://www.epa.gov/storet/index.html
[196] http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1
[197] http://www.sws.org/.
[198] http://www.awra.org/index.html.
[199] http://aslo.org/index.html.
[200] http://www.fisheries.org/html/index.shtml.
[201] http://www.asih.org/.
[202] http://www.benthos.org/index.cfm.
[203] http://www.aou.org/.
[204] http://www.cwp.org/index.html
[205] http://www.stormwatercenter.net/
[206] Microsoft Bing Maps http://www.microsoft.com/maps/; Google Earth http://earth.google.com/.

allow users to import existing geo-referenced maps and datasets and create new, or manipulate existing, data layers to produce customized maps and geographic analysis.

Note, the use of any private software for official government business may require licensing fees and agreements.

Appendix A: Clean Water Act Section 401

33 USC 1341; CWA §401

(a) Compliance with applicable requirements; application; procedures; license suspension

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 301(b) and 302 of this title, and there is not an applicable standard under sections 306 and 307 of this title, the State shall so certify, except that any such certification shall not be deemed to satisfy section 511(c) of this title. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirements in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or

permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 301, 302, 303, 306, or 307 of this title.

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 301, 302, 303, 306, or 307 of this title.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this chapter that such facility or activity has been operated in violation of the applicable provisions of section 301, 302, 303, 306, or 307 of this title.

(6) Except with respect to a permit issued under section 402 of this title, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

(b) Compliance with other provisions of law setting applicable water quality requirements

Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees

In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Limitations and monitoring requirements of certification

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this title, standard of performance under section 306 of this title, or prohibition, effluent standard, or pretreatment standard under section 307 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.