

8. Getting Involved: Authorities, information requirements, and Licensing Processes

This final chapter provides a brief overview of the authorities and processes required to develop hydrokinetic projects, then highlights key information requirements and opportunities for addressing recreation issues. The chapter includes three In Focus sections on recreation and aesthetic information requirements, study requests and settlements, and consultation requirements with the National Park Service. More detailed information about specific steps and roles for applicants and stakeholders are available from [FERC](#) and the [Bureau of Ocean Energy Management, Regulation, and Enforcement \(BOEMRE\)](#). Additional resources to help navigate the authorization processes include materials available from [DOE](#) and the [Hydropower Reform Coalition](#).

Authorities and information requirements

The authorization process for hydrokinetic projects is complex and it is beyond the scope of this document to provide detailed information. For the latest information on various requirements, consult with the relevant agencies. However, the basic authorization paths are shown in Figure 8-1 and briefly described below.

A hydrokinetic project requires federal authorizations to operate. Although the types of required authorizations may vary depending on the project location, most will need a license from FERC and those located on the Outer Continental Shelf ⁶ (OCS) also require a lease from BOEMRE. Each agency uses its own basic authorities and follows NEPA during its environmental review. Both agencies provide for public involvement.

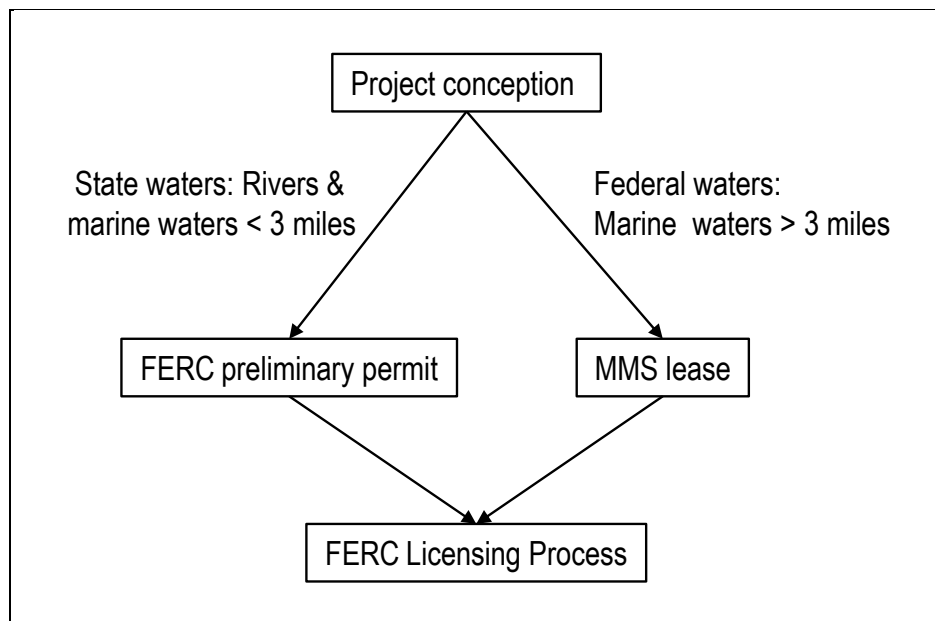


Figure 8-1. Federal authorizations for hydrokinetic projects.

⁶ The OCS includes all submerged lands, subsoil, and seabed lying between the seaward extent of the States' jurisdiction (approximately 3 nautical miles from shore, or 3 marine leagues for Texas and the Gulf coast of Florida) and the seaward extent of federal jurisdiction (approximately 200 nautical miles or more from shore).

The intent of NEPA is to help public officials understand the environmental consequences of potential federal actions and review alternative ways to protect, restore, and enhance the environment in conjunction with those decisions. While NEPA processes are sometimes implemented differently by federal agencies, both FERC and BOEMRE are required to prepare either an Environmental Assessment (EA) or Environmental Impact Statement (EIS), depending upon the nature of the action and the significance of potential impacts. Both agencies involve the public in preparing and implementing NEPA procedures, so stakeholders have opportunities to provide comments before any final action. FERC provides guidelines for [public participation](#). Additional NEPA resources include: [Preparing Environmental Documents](#) and the Council on Environmental Quality (CEQ) website to guide the public “[A Citizen’s Guide to the NEPA – Having Your Voice Heard](#).”

The [siting handbook](#) for wave and hydrokinetics projects prepared on behalf of the Department of Energy (Pacific Ventures, 2009) provides an excellent overview of the various authorizations required at the State and Federal level, including consultations under various laws such as: the [Clean Water Act section 401\(a\)](#), the [Endangered Species Act](#), [Coastal Zone Management Act](#), [National Historic Preservation Act](#),⁷ and with federal land managers that are integrated with licensing/leasing authorities of FERC and BOEMRE. The NEPA process provides a mechanism for additional agencies and others to provide expertise and make recommendations. For example, the U.S. Coast Guard may make recommendations about navigation safety and maritime security. More guidance about FERC hydropower licensing is available from [Citizen’s Toolkit for Effective Participation in Hydropower Licensing](#) (Hydropower Reform Coalition, 2005).

BOEMRE Lease

Projects located on the OCS require a lease (or an easement/right of way) from the BOEMRE, in addition to a license from FERC. The basic authority is the 2005 Energy Policy Act (EPA), [Section 388](#), as codified in subsection 8(p) of the Outer Continental Shelf Lands Act (OCSLA).

The BOEMRE will convey the property right (lease or grant) on the OCS for hydrokinetic projects, and FERC will license and regulate the construction and operation of the generating facility. A FERC license can only be obtained after securing a lease from the BOEMRE.

Additional information is available from the BOEMRE, the [Programmatic Environmental Impact Statement](#) on the leasing process, and the [Final Renewable Energy Framework](#). BOEMRE provides public participation guidelines at [Environmental Comment – Public Review](#).

FERC Preliminary Permit

A FERC [preliminary permit](#) provides the exclusive right to apply for a license for a particular site for a period of 36 months. It does not authorize construction or guarantee the issuance of a project license and grants no land-disturbing or other property rights. The basic authority is the [1935 Federal Power Act](#) (FPA) and associated amendments.

Preliminary permits are available, but optional, for in-river and marine projects in state waters. It is not necessary to obtain a permit in order to apply for or receive a license. Preliminary permits are not

⁷ Additional laws with consultation requirements include: Magnuson-Stevens Fishery Conservation and Management Act, Pacific Northwest Power Planning and Conservation Act, Wild and Scenic Rivers Act, Wilderness Act, and Marine Mammal Protection Act.

available for projects located on the OCS.

FERC has adopted a “strict scrutiny” approach for evaluating applications for preliminary permits. Under this approach, FERC states that it will review preliminary permit applications for hydrokinetic projects to limit the boundaries of permits to prevent site banking and to promote competition. Further, to ensure that permit holders are actively pursuing project exploration, FERC intends to carefully scrutinize semi-annual applicant reports and consider canceling permits that do not show sufficient progress. For additional information on the Commission’s “strict scrutiny” approach, see the [Order Issuing Preliminary Permit for the Reedsport OPT Wave Park, LLC](#) (FERC Project No. 12713-000).

We recommend that applicants interested in obtaining a preliminary permit consult with recreation stakeholders early in the process, especially to identify locations that might adversely affect significant recreational and aesthetic resources and identify issues that may need additional evaluation.

FERC License

A FERC license is the primary regulatory document that authorizes the use of public waters for electricity generation, and is required for projects located in state and off-shore federal waters. It specifies the conditions and legal responsibilities for construction, operation, and maintenance of the project (including a schedule). When final, a license is enforceable by FERC, who may issue fines or revoke a license in the event of systematic non-compliance. Licenses often require mitigation for environmental and recreational impacts, as well as monitoring to assure compliance and (in some recent licenses) to evaluate whether the measures have the intended results. Specific content for draft applications is described in FERC’s [checklist](#).

Under the FPA, any applicant must consult with appropriate federal, state, and local resource agencies, Indian tribes, non-governmental agencies, and members of the public (all of these are considered as “stakeholders” for the purpose of this report).⁸ For projects located in the United States, individuals and organizations with recreation interests have the right to participate as a stakeholder.

Applicants for a FERC license must address information about recreation (18 CFR § 5.6(viii)), aesthetics (18 CFR § 5.6(ix)), and wildlife information related to recreation (18 CFR § 5.6(v)(b)) as part of their draft license application (see In Focus section on Recreation and Aesthetic Information Requirements for FERC Hydropower Licenses below). We encourage applicants to contact and involve potential recreation stakeholders in developing this information because they may be knowledgeable sources of information and can help identify issues of concern and study needs. Input helps assure that licenses protect and enhance fish and wildlife resources, recreation, and water quality. There is both a process and a goal to accomplish this; under the Electric Consumers Protection Act (ECPA, 1996) FERC is required to give “equal consideration to power and non-power values” when issuing licenses. Recreation qualifies as “non-power” values.

Although the FERC licensing processes allow comment at many stages, early involvement offers more opportunities to learn concerns and address them, and is recommended as a best practice in [guidance](#) available from FERC. We recommend applicants to reach out early and often to stakeholders in order to understand and address recreational, aesthetic, and other potential impacts. Stakeholders should contact the developer directly, seek assistance from federal or state agencies, talk with local environmental and recreational nonprofits, and formally participate in the process for licensing any new hydroelectric

⁸ The consultation role of the National Park Service goes beyond addressing impacts to National Parks and is confusing to many applicants. (See In Focus: Hydropower Proposals and the National Park Service).

project. Early involvement is even more important for new technologies that require authorizations from multiple agencies and jurisdictions (e.g., projects sited on the OCS require FERC licenses and an BOEMRE leases). While FERC's pilot process (small, short-term, removable, and carefully monitored projects intended to test technologies, sites, or both) is intended to reduce the time required to receive a pilot license to as few as six months, the typical permitting and licensing process is expected to require more than five years before a final license is issued and construction can begin. This process is more analogous to a marathon than a sprint, and both applicants and stakeholders should be prepared for several years of involvement. Again, experience shows that success for developers, agencies, and stakeholders is higher when the range of stakeholder input is broad and available early in the process.

There are many opportunities for stakeholders to participate in the licensing process including:

- Helping identify issues of concern.
- Proposing studies and negotiating study plans.
- Commenting on licensee proposals, including:
 - issue identification
 - studies
 - proposed project operations
- Making recommendations about operations and protection, mitigation, and enhancement measures.
- Challenging FERC decisions through administrative and legal appeals.

The study process is particularly relevant to this guide. The study plan describes how new information will be collected to prepare license applications. Information is needed to characterize the environmental baseline affected by the project and to assess potential project impacts and alternatives to protect, mitigate, and enhance environmental quality.

This is an iterative process that includes the applicant developing a study plan in consultation with agencies, tribes, and other participants; opportunities for stakeholders to comment and request studies; meetings to informally clarify the plan and resolve outstanding issues; a formal study dispute process available to Federal agencies with mandatory conditioning authorities; and ultimately, FERC approving the revised study plan with any modifications after considering all information in the record.

Study requests must meet strict criteria. (See "In Focus: Making Study or Information Requests and Settlements").

FERC Licensing Processes

There are two general types of licenses that can be obtained from FERC for hydrokinetic projects: 1) pilot license or 2) conventional license, briefly described below. Additional information on hydrokinetic licensing processes is available from [FERC](#). One key difference between these types is when study information is collected.

FERC Pilot Hydrokinetic Licenses

The purposes of licensing hydrokinetic pilot projects are to test new, hydrokinetic technology devices; to determine the appropriate sites for hydrokinetic projects; and to gather information on environmental and other impacts of the devices. Most impact studies will occur during the pilot license term (about 5 years), rather than during the application process for a conventional license. The process includes opportunities for input from federal, state, and local resource agencies, Indian tribes, non-governmental organizations, and members of the public. The process allows applicants to collect information to determine whether or

not to progress to a full-scale project. If not, then the licensee has responsibility to remove the pilot project. Expansion beyond the pilot project will require a new application (usually through the Conventional Hydropower License Process; see below).

Additional information about [pilot license criteria and requirements](#) is available from FERC. To qualify, a project must meet the following criteria:

- Projects will be small in capacity (equal to or less than 5 MW) and occupy the minimum area commensurate with the technology to be employed;
- the license will be short term;
- Project site avoids sensitive locations;
- Project applications will contain strict safeguard plans to protect the public and environmental resources
- Projects will be removable and able to shut down on short notice, and will be removed, with site restored, before the end of the license term (unless a new license is granted); and
- the draft application must be in a form sufficient to support environmental analysis and include proposed monitoring plans

FERC Conventional Hydropower Licenses

Hydrokinetic projects are not limited to the Pilot Licensing process. Developers can initially choose to use FERC's conventional [hydropower licensing processes](#), or use a conventional process to transition from a successful pilot process to full build-out. Conventional licenses are issued for 30 to 50 years. The licensing process provides multiple opportunities for stakeholder input and requires studies during the application process. Key elements of licensing are listed below. Detailed information about these elements is beyond the scope of this report. In addition to guidance available from FERC, stakeholders are encouraged to review guidance available from [DOE](#) and the [Hydropower Reform Coalition](#).

Key Elements of FERC Hydrokinetic Licensing Processes

- Preliminary Application Document (PAD)
- NEPA scoping and stakeholder comment
- Develop study plans
- Conduct studies
- Preliminary license proposal
- Final License Application (FLA)
- FERC-conducted NEPA
- FERC License Order
- Project development and monitoring

In Focus: FERC Recreation and Aesthetic Information Requirements

The following information is **required** by FERC as part of both pilot and conventional licensing, as listed below and described in (**18 CFR § 5.6**).

Recreation and land use (18 CFR § 5.6(viii)). A description of the existing recreational and land uses and opportunities within the project boundary. The components of this description include:

- Text description illustrated by maps of existing recreational facilities, type of activity supported, location, capacity, ownership and management;
- Current recreational use of project lands and waters compared to facility or resource capacity;
- Existing shoreline buffer zones within the project boundary;
- Current and future recreation needs identified in current State Comprehensive Outdoor Recreation Plans, other applicable plans on file with the Commission, or other relevant local, state, or regional conservation and recreation plans;
- If the potential applicant is an existing licensee, its current shoreline management plan or policy, if any, with regard to permitting development of piers, boat docks and landings, bulkheads, and other shoreline facilities on project lands and waters;
- A discussion of whether the project is located within or adjacent to a:
 - River segment that is designated as part of, or under study for inclusion in, the National Wild and Scenic River System; or
 - State-protected river segment;
- Whether any project lands are under study for inclusion in the National Trails System or designated as, or under study for inclusion as, a Wilderness Area.
- Any regionally or nationally important recreation areas in the project vicinity;
- Non-recreational land use and management within the project boundary; and
- Recreational and non-recreational land use and management adjacent to the project boundary.
- Aesthetic resources (18 CFR § 5.6(ix)). A description of the visual characteristics of the lands and waters affected by the project. Components of this description include a description of the dam, natural water features, and other scenic attractions of the project and surrounding vicinity. Potential applicants are encouraged to supplement the text description with visual aids.
- Wildlife information related to recreation - Temporal or spatial distribution of species considered important because of their commercial, recreational, or cultural value (18 CFR § 5.6(v)(b)).

In Focus: Making Study Requests and Settlements

The results from studies and the project study plan provide key information in the record on which FERC will make its decision in a typical proceeding. Commenting on and requesting studies is a good way for public and agency stakeholders to start working directly with the applicant to provide early and substantive input in the process, and to influence FERC on including conditions to protect sensitive recreational and other resources. Early collaboration can also reduce controversy and uncertainty concerning the outcome of a licensing proceeding. Additional guidance about studies is available from [FERC](#) and the [Hydropower Reform Coalition](#).

The study plan must: (1) identify each study to be completed by the licensee to characterize existing conditions of resources affected by the project; (2) identify corresponding management goals and objectives; and (3) and propose analytical methods (generally, field studies) to determine the nature and scope of the project's existing or potential impacts and alternatives to mitigate such impacts. As specified by CFR 18, §5.9(b) of FERC's regulations under the Integrated Licensing Process (ILP), study requests must address the following seven criteria:

- Subject and purpose of the request (e.g., “this study will assist in our understanding of project impacts on the following resource...”);
- Relevant management goals of any agency or tribe with jurisdiction over the resource to be studied;
- Relevant public interest considerations supporting the request, if the commenter is not an agency;
- Existing information concerning the subject and an explanation why additional information is needed;
- Nexus between the project and the resource to be studied, and how the study results will inform the development of the license articles;
- Proposed study methodology and explanations why they are consistent with generally accepted practice in the scientific community or, as appropriate, consider relevant tribal values and knowledge; and
- Level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

Settlements

One method for seeking early collaboration and reducing controversy is by seeking a settlement agreement among all or most of the project stakeholders: “The Commission looks with great favor on settlements in licensing cases. When parties are able to reach settlements, it can save time and money, avoid the need for protracted litigation, promote the development of positive relationships among entities who may be working together during the course of a license term, and give the Commission, as it acts on license applications, a clear sense as to the parties’ views on the issues presented in each settled case” ([See FERC Policy Statement on Settlements, 2006](#)).

Settlement discussions can begin whenever the licensee and a critical mass of other participants believe there is a reasonable prospect of timely success, and early collaboration provides an opportunity to create agreement about studies and license provisions, including mitigation. Settlement also prevents or at least reduces the frequency or severity of disputes about the adequacy of the licensee's study plan, so early collaboration and involvement with study plans is often the earliest opportunity to reach agreement and a potential course towards settlement. FERC prefers settlement as the basis of any new license for a given project, no matter which of the licensing processes is used. Even though the three conventional licensing processes (i.e., ILP, TLP, ALP) differ in their emphasis on collaboration, Practice and Procedure Rule 601 establishes settlement as an accepted method to resolve disputed issues in any proceeding before FERC (18 CFR § 385.601 *et seq.*).

In Focus: Hydropower Proposals and the National Park Service

The National Park Service (NPS) may become involved in hydropower proceedings for a variety of reasons including:

- Potential impact on recreation opportunities;
- Potential impact on the National Park System resources; and
- Potential impact on areas where NPS has oversight or management responsibilities.

NPS Hydropower Recreation Assistance

Consultation with the National Park Service is required in FERC hydropower licensing proceedings, regardless of whether a park unit is affected (18 C.F.R. § 4.38(a), 18 C.F.R. § 5.1(d), and 18 C.F.R. § 16.8(b)(4)). This broad responsibility stems from the NPS Organic Act (16 U.S.C. § 1 *et seq.*) and the technical assistance provisions of the Outdoor Recreation Act (16 U.S.C. § 4601-1), the Wild and Scenic Rivers Act of 1968 (PL 90-542), and the National Trail System Act of 1968 (16 U.S.C. § 1246(a)).

When evaluating proposals for technical assistance, NPS may select projects that do not impact the Park System or places where NPS has oversight (see below). NPS *Policy and Guidelines for Recreational Technical Assistance in Hydropower Licensing* (Federal Register 57 FR 61915, December 29, 1992) provides a framework and criteria for project selection. Priority is given to projects in areas with high natural, cultural and/or recreational resource values and where there is a significant opportunity to create or improve recreation opportunities. In addition, NPS seeks to provide assistance for a diverse mix of recreation experiences, settings, and geographic locations, particularly if multiple projects are involved. NPS also gives priority to requests from groups that have little or no access to professional sources of planning assistance and analysis. For more information about the NPS Hydropower Assistance Program see <http://www.nps.gov/hydro>

Hydropower and Units of the National Park System

The Federal Power Act generally prohibits FERC from licensing or exempting hydropower projects within National Parks and Monuments 16 U.S.C. §§ 797a (2006). The Federal Power Act also prohibits FERC from licensing hydropower projects within the boundaries of other units of the National Park System if those projects “would have a direct adverse impact to federal lands within any such unit” 16 U.S.C. § 797c (2006).

When project boundaries overlap with federal lands managed by NPS, NPS may require developers to obtain an NPS issued right-of-way permit 16 U.S.C. §§ 5, 79 (2006). In these situations, NPS may also develop conditions to ensure the adequate protection and utilization of the federal lands managed by NPS, which FERC must include in the project license 16 U.S.C. § 797(e) (2006). In situations where a project would be sited in a unit of the national park system, but where the project boundary does not overlap NPS lands, it may recommend terms and conditions to FERC that would best adapt the project to a comprehensive management plan for that unit 16 U.S.C. § 803(a)(2) (2006). In addition to the authorities described above, enabling legislation for any national park system unit potentially affected by a project must be reviewed to identify additional protections or authorizations that may apply.

BOEMRE is also prohibited from leasing projects in any unit of the National Park System, or similar protected conservation units such as National Marine Sanctuaries, National Wildlife Refuges, and National Monuments on the OCS 43 U.S.C. § 1337(p)(10); Pub. L. 109–58, § 388(a)(2005).

NPS Oversight Responsibilities

NPS has several oversight responsibilities relevant to recreation areas protected under many federal laws. Local, tribal, and state government lands that have received grants through the Land and Water Conservation Fund (LWCF) are protected under Section 6(f) of the LWCF Act for public outdoor recreation use. Any conversions from outdoor recreation use require NPS approval and replacement property (equal to current market value, in a similar location, and with reasonably equivalent usefulness). Similarly, local government lands with recreation sites that were rehabilitated through the Urban Park and Recreation Recovery (UPARR) program are protected under Section 1010 of the Urban Park and Recreation Recovery Act of 1978, as amended. Local government and state lands that have been donated through the Federal Lands to Parks program are also restricted to public recreation use only; conversion of lands to non-park use triggers a reversion of title to the federal government. See 16 USC §4601-8; 16 USC §2501-14; 36 CFR §59; 40 USC § 550 (b), (e); 41 CFR § 102-75.625 through 75.690.

In addition, NPS has special oversight responsibilities, along with the other river administering agencies, for the [National Wild and Scenic Rivers System](#). FERC is prohibited from licensing new construction of hydropower projects within the boundaries of Wild and Scenic Rivers and rivers that have been designated for potential inclusion into the Wild and Scenic Rivers System. 16 U.S.C. § 1278(a)-(b) (2006). FERC is subject to the river-administering agency's finding relating to hydropower projects located below/above, or on a tributary to, a designated Wild and Scenic River or a congressionally authorized study river. 16 U.S.C. § 1278(a)-(b) (2006). For designated rivers, a downstream/upstream project may not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present at the date of designation. For congressionally authorized study rivers, greater protection is provided. The project must not invade the area or diminish the area's values.

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