

# Regulatory Mapping and Streamlining of Tide Gate Permitting in Coastal Oregon

Master of Community and Regional Planning Professional Project

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## Abstract

This project explores the complex multi-agency regulatory process involved in tide gate permitting on the Oregon Coast. The goal of this research is to highlight regulatory streamlining efforts as a means to increase the efficiency and effectiveness of tide gate permitting in Oregon. The guiding research question for this project is twofold. First, what does the combined regulatory process look like when visually mapped and second, what does this mapping exercise illuminate in terms of inter-agency collaboration and streamlining strategies to increase efficiencies in the permitting process. The regulatory agencies with stake in Oregon tide gates include the Oregon Department of Fish and Wildlife (ODFW), the National Marine Fisheries Services (NMFS) within the National Oceanic and Atmospheric Administration (NOAA), the Oregon Department of State Lands (ODSL), and the United States Army Corps of Engineers (Corps). Details of these regulatory authorities and their permitting processes are acquired through interviews and group discussion with key staff at relevant agencies and watershed councils. This project concludes in presenting regulatory process maps for individual agencies and a combined regulatory process map with integrated recommendations for how the state and federal agencies can more effectively permit tide gate projects on the Oregon Coast.

## Introduction

Tide gates are an aging and critical system of infrastructure scattered along the Oregon Coast. Historically, tide gates have served as one component of infrastructure systems used to drain estuarine wetlands for agriculture, grazing, or other land use development (Giannico & Souder 2005). A tide gate is a flap, door, or gate that hangs from hinges. It serves as a barrier between partially drained freshwater land and a saltwater estuary or bay. A tide gate might protect farmland and pasture from salt water, protect infrastructure or development from flooding, or do both. When freshwater from high stream flow rises on the drained side, the tide gate allows that water to exit into the bay or estuary. When the tide rises, the tide gate closes and prevents brackish water from entering the drained land. These partially drained areas are

often a great habitat for fish. Traditionally designed tide gates create a significant barrier between fish and this habitat. Figure 1 shows a traditional side hinge tide gate in Coos Bay, Oregon.

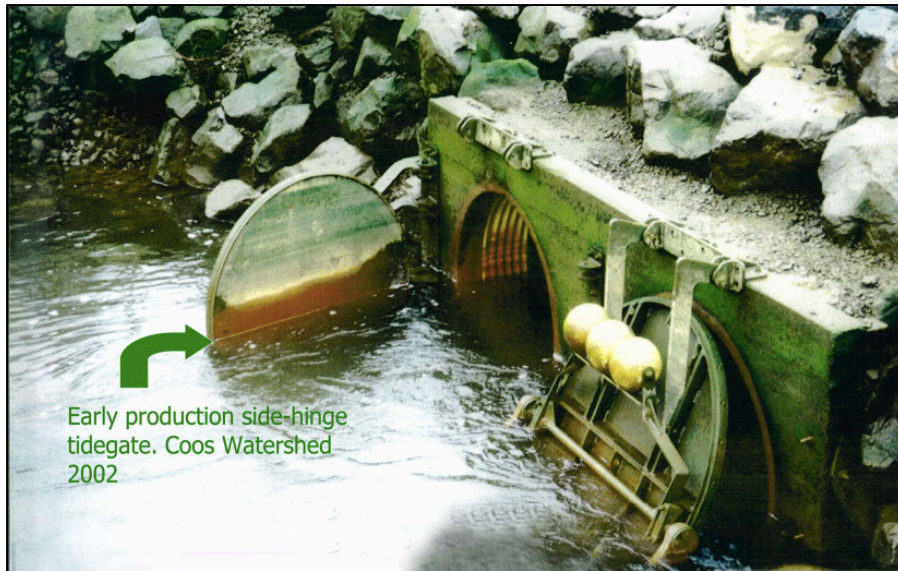


Figure 1: Tide Gate in Coos Watershed, OR: Coos Watershed Association.

The US has a long history of draining wetlands for alternative land uses. Oregon is no exception. Between 1780 and 1980, the state's coastal and interior wetlands decreased by 38% (Dahl 1990). In Coos Bay, Oregon nearly 90% of the original tidal marshes are lost due to the systems of dikes and tide gates put in place over the last 200 years (Hofnagle et al. 1976). As a result of this widespread wetland conversion, many urban areas and their local economies now rely on tide gates' continued functionality. Without them, many urban and rural areas would regularly flood and be vulnerable to coastal storm events. Figures 2 illustrates where these tide gates might be located in a watershed and how they would protect development. Specifically, this figure shows the location of a tide gate, indicated by an arrow, in the United Kingdom that protects both farmland and a small town.



Figure 2: Tide gate location in watershed in Seaton, United Kingdom: Environment Agency UK.

The exact number of tide gates in Oregon is still unknown. In 2001, Oregon House Bill 3002 was signed into law by Governor Kitzhaber. In addition to updating fish passage law, the regulation requires the Oregon Department of Fish and Wildlife to complete and maintain a statewide inventory of artificial obstructions in waters of the state (Oregon HB 3002). This inventory is still ongoing. As a result, the total number of tide gates is unknown but expected to range between 1,500 and 2,500. However, some coastal jurisdictions in Oregon are extensively mapped and have completed their portion of the inventory. For example, Figure 3 shows a map of Coos Bay, Oregon with a dot denoting the 138 tide gates in the watershed.

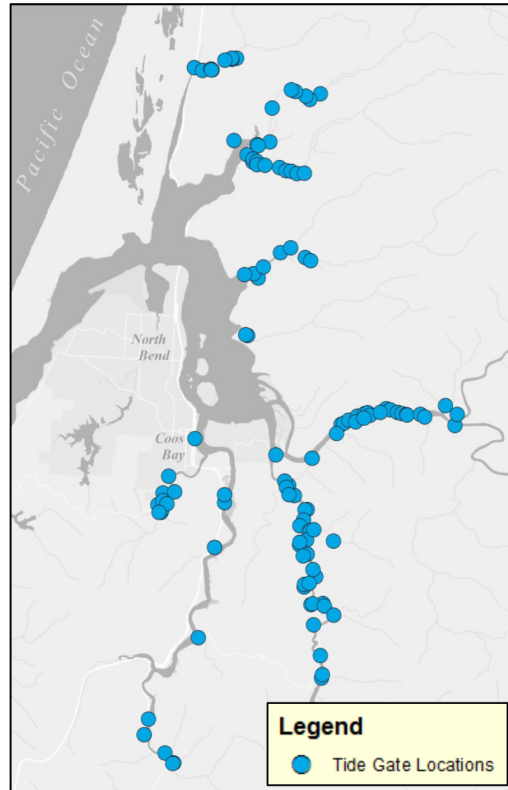


Figure 3: Map of tide gates in Coos Watershed, OR: Partnership for Coastal Watersheds.

Improving the effectiveness of tide gate regulation has become a recent priority of the Oregon Watershed and Enhancement Board (Oregon Tide Gates Partnership). There are a number of reasons for this recent focus. First, many of these tide gates are approaching their infrastructure lifespan and in need of repair or complete replacement. Due to their reliance by stakeholders and effect on aquatic ecosystems, a potential gate failure would result in significant monetary loss and habitat consequences. Many of these older tide gates are also significant barrier to fish passage. By actively prioritizing tide gate repair, OWEB can further its mission to improve Oregon’s watersheds by modernizing old tide gates to meet new fish passage regulation. Furthermore, many of the permits needed to meet fish passage criteria are valid for an extended period of time. As a result, the widespread need for updated permits to meet the criteria is an opportunity for OWEB and its partners to have a long-lasting impact on improving aquatic ecosystems in Oregon. Lastly, tide gate restoration and removal projects can be incredibly costly and a burden for local landowners to repair. To address these costs, OWEB has identified tide gate restoration investments as a priority area to investigate via its

effectiveness monitoring program. Ultimately, the challenges in balancing local landowner needs, maintaining adequate fish passage, and improving watershed and ecosystem health make tide gate projects incredibly complex.

To take on these complex challenges, OWEB directed funding to the Institute for Natural Resources (INR) at Oregon State University to develop a comprehensive report on tide gate restoration efforts to date in the Pacific Northwest. Published in February 2018, the report, titled *Ecological Effects of Tide Gate Upgrade or Removal: A Literature Review and Knowledge Synthesis*, reviews literature and lessons learned from previous tide gate restoration projects. The report also compiles summaries on the effectiveness of tide gate monitoring projects in the Pacific Northwest (OWEB 2018).

Building on these early efforts, OWEB formed a statewide multi-stakeholder collaboration called the Oregon Tide Gates Working Group. The group's objective is to "develop a voluntary, collaboration-based action plan for tide gate repair and replacement that is cost effective, efficient to implement and is supported by tide gate owners, regulatory agencies, and organizations providing technical assistance and funding" (Oregon Tide Gates Partnership). The group is led by OWEB Executive Director Meta Loftsgaarden, OWEB Partnerships Coordinator Jillian McCarthy, two County Solutions Directors at the Association of Oregon Counties, Mark Labhart and Greg Wolf, and the County Solutions Executive Assistant at the Association of Oregon Counties, Sara Gamaney.

The Oregon Tide Gates Working Group efforts began December 2017 with multi-stakeholder discussion meetings. Participants included landowners, state and federal agencies, agricultural organizations, counties, and conservation organizations. These discussions were categorized into four main elements. They included development of 1) a state-wide tide gate inventory, 2) an online interactive decision support tool to identify priority project sites, 3) an engineering toolbox for replacing old and designing new fish friendly gates, 4) a monitoring plan for evaluating current and future projects, and 5) a regulatory toolbox providing clarity and assurances for navigating project permitting and regulatory compliance (Oregon Tide Gates Partnership).

This masters project on regulatory mapping and streamlining is a component of the regulatory toolbox objective initiated by OWEB and the Oregon Tide Gates Working Group. Prior to this project's initiation, the Tide Gate Regulatory Group engaged in a series of working discussions to review current federal, state, and local regulations affecting tide gates. The aim of these discussions was to identify current regulatory procedures and strategies to streamline the permitting process for a tide gate project. Facilitated again by OWEB, the group consisted of agency staff from Oregon Fish and Wildlife (ODFW), National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration (NOAA), U.S. Army Corps of Engineers (Corps), and Oregon Department of State Lands (ODSL). Though many of the agency staff involved had worked on previous projects together, this working group was the first time strategic and collaborative planning had occurred on the topic of tide gates.

These initial inter-agency group collaboration meetings occurred five times in 2018 and twice thus far in 2019. Meeting notes from these 2018 working group discussions indicate a process that involved identification of desirable and undesirable outcomes, current and expected problem points in the permitting process, and development of potential strategies for process alignment and streamlining. One outcome of these meetings was an identified need to develop a process map of the existing regulatory pathways for tide gate projects. These maps would show the current process for a tide gate project and highlight a future desired process map with streamlined strategies. Realizing a need for additional capacity, OWEB's director of partnerships, Jillian McCarthy reached out to Rich Margerum at the University of Oregon's Community and Regional Planning Department for a potential research aid to lead the mapping efforts. As a result, this MCRP professional project on regulatory mapping and streamlining was born with research efforts beginning in January of 2019.

## Why is regulatory streamlining important?

Frequent review of internal regulatory processes and consequent streamlining is a necessary action to maintain effectiveness in reaching desired outcomes of regulation (OECD, 2010). In other words, regulatory processes need to be recurrently evaluated for their

effectiveness. If a regulation is not adequately enforced, clearly defined, or is found to be too burdensome, there becomes an incentive to avoid them altogether. For example, in the context of environmental regulation, when air pollution controls can't be enforced on polluters, their emissions behavior is unlikely to change. Similarly, if pollution controls are unrealistic, costly, or too burdensome, polluters may try to find ways to maneuver the system and not change their emissions behavior. In these instances, citizens, regulators, and those regulated each lose or put themselves at greater risk to future environmental consequences. Policymakers have an obligation to set rules and regulations at a level where they are realistic and most effective. Likewise, regulatory authorities have a responsibility to ensure these regulations are implemented efficiently and transparently (OECD, 2010, Nash et al. 2015).

The case for efficient and transparent regulation is especially important in arenas where multiple regulatory agencies have a stake (Nash et al. 2015). Such is true for tide gate regulation in Oregon. The state, federal government, and local jurisdictions each have their own set of rules. While one jurisdiction may have rules that are clear and easy to follow, another agency may have less defined rules, be constrained to a different timeline, or need authorization from other agencies to proceed. This lack of alignment can delay or even halt the process, creating detrimental conditions for citizens, other regulators, and those being regulated. In these instances, effective collaboration between regulatory authorities is paramount. The following is a literature and case study review exploring the successes and lessons learned from collaboration efforts in regulation. Ultimately, this review will help inform collaboration and streamlining efforts in tide gate permitting in Coastal Oregon.

## What has regulatory streamlining looked like in the past and where is it today?

The concept of regulatory streamlining is largely rooted in the “War on Waste” movement within public administration. As the role of government grew in 20<sup>th</sup> century America, criticism of how internal resources were managed and how taxpayer money was spent became a focal point. Whether through enforcing regulation, providing services, or



enacting policy, the War on Waste reform movement centered on one clear principal: economy in government (Light, 1997). Regulatory streamlining evolved from the appeal to make government lean and efficient. Much of this bled into environmental reform. The focus became better agency enforcement and faster distribution of project permits. For example, at the height of the War on Waste reform movement and more than decade after federal and state environmental regulations had taken shape, the *Journal of Land Use and Environmental Law* published a review of Florida's "seemingly insoluble maze of governmental regulation." The authors cite the permits, licenses, and other forms of authorized required by local, regional, state, and federal government agencies in the environmental review process as overly burdensome and redundant. Their conclusion recommends two main streamlining efforts. These included 1) decreasing the amount of agency staff time and number of positions dedicated to reviewing the environmental impacts of proposed projects and 2) decreasing the allowable time for granting or approving permits (Landers et al. 1986). Most clearly, these recommendations center on making cuts to time.

Since then, efforts to reform and streamline regulatory processes have moved away from cutting internal resources to making better use of that which they already have. In other words, regulatory streamlining efforts are now aimed at increasing internal efficiency rather than eliminating capacity. One of the concepts for regulatory reform that responded to the War on Waste movement was the idea of backward mapping. Backward mapping aims "to bring affected stakeholders into the process of designing and implementing strategies, proceeds incrementally to build a consensus for change, and leads to proposals that allow greater discretion and flexibility at the ground level" (Fiorino 1997). This reform strategy was designed to replace the top-down processes that were commonplace in policymaking and regulatory enforcement. By engaging in backward mapping, complex environmental problems such as tide gate permitting would first be understood at the ground level. Reform strategies would be born from stakeholder engagement from land owners rather than the distant, and likely detached, policymaker.

Further building on the concept of backward mapping and accepted today as an effective strategy of regulatory streamlining is collaboration between regulators and

stakeholders. Collaboration as a streamlining strategy has been found especially successful in environmental regulation. Managing natural resources and complex ecosystems demands collaboration between regulators due to the variety and overlap of jurisdictions. Extensive research has been done to catalogue the range of regulatory collaborations in managing watersheds and aquatic ecosystems. Common characteristics of successful efforts include consensus building among regulators, acknowledgement and removal of power imbalances between stakeholders, and engagement of stakeholder groups beyond just negotiation (Margerum 2002, Innes et al. 1999). In their report *Managing Land as Ecosystem and Economy*, The Lincoln Institute of Land Policy cites environmental and land use regulation in the Florida Everglades as successful due to a two-part collaboration. First, regulatory authorities from multiple jurisdictions came together and identified common goals and processes. Second, and equally important, was the collaboration between regulators and Florida land owners. The main concern of Florida land owners was the potential damages to their farmland from reintroducing natural flows to the wetland system. The report concludes with two recommendations for collaboration in environmental regulation. These include 1) writing a clear agreement of goals between agencies, and 2) defining a willingness to enforce both process goals and regulatory standards. Ultimately, fulfilling a commitment to the agreed upon goals builds trust among agencies and creates transparency for those affected by regulation.

### How can these strategies be applied to the existing framework of tide gate regulation in Oregon?

The research on collaboration and streamlining is more limited in the context of the environmental permitting process. However, worth emphasizing here for its applicability to tide gate permitting is *A Framework for Building Efficient Environmental Permitting Processes* (2017). In this work, Ulibarri et al. highlight many of the common inefficiencies identified with environmental permitting that can be eliminated through collaboration. Specifically, these are targeted collaboration efforts between the regulatory and permitting agencies and the permit applicants. Despite their inefficiencies, permits are a widely used regulatory tool to protect the

environment. Specifically, permits set acceptable limits to potential damages from a construction project to protected lands, endangered or threatened species, ecosystem health, and health of people in close proximity. The authors examine four case studies with collaboration between agencies and applicants. These include a county-wide process overseeing construction and restoration near streams; a large-scale habitat restoration; a wastewater treatment and habitat restoration; and flood control plan. The permit types required in these projects related to local land use, endangered species, clean water, and coastal management across local, regional, and national jurisdictions.

The researchers highlight in these case studies and other literature many of the issues in a permit application process and the challenges in addressing them. One of the common problems comes from multiple agencies asking for the same information but in slightly different ways. Integrated permits and consistent documentation are just two strategies to alleviate this issue. Efforts to create an online database of technical information, such as habitat characteristics or topography profiles, have also been suggested, but were only found useful if agencies commit to their use. Other online tools, such as a platform for applicants to track their application, were found unsuccessful and difficult to find consistent resources for upkeep.

Ultimately, to address the concerns described above, the authors advocate for collaboration with early and ongoing dialog between the permitting agencies and applicants. The successes in the four case study projects are found to be largely due to the following collaboration characteristics. First, applicants had the opportunity to meet and discuss with regulatory staff face-to-face. This interaction built trust and helped all parties understand the values and varying interests with a project. Additionally, this interaction was found to be most successful when agencies engaged with applicants together and at the same time. Being present as a group was found to be essential to discuss priorities and expectations from all perspectives. Also critical was beginning these discussions with the applicant well before they engaged in the permitting process. In all instances, this early pre-permit engagement resulted in a faster permit approval that met the range of criteria from regulatory authorities. Together, these steps can reduce incomplete application submittals, reduce additional information requests, reduce lost time to secondary preparation and review, and in turn reduce transaction

costs for the applicant and regulatory agencies. Ulibarri et al. conclude that collaboration strategies focused on reducing uncertainty, improving negotiation and commitment, and reducing transaction costs will increase efficiency without compromising environmental protection.

## Case Study: Skagit Delta Tide Gates and Fish Initiative

The Skagit Delta Tide Gates and Fish Initiative in Washington is a collaborative, multi-stakeholder process assembled by the Western Washington Agricultural Association (WWAA) in March 2006. The objective of this collaboration is to identify pathways and protocols for local, state, and federal permitting of tide and flood gate repair and replacement in the Skagit and Samish River deltas. The initiative is an agreement and formal commitment by WWAA; the National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration (NOAA); the US Fish and Wildlife Service (USFWS); and the Washington Department of Fish and Wildlife (WDFW). The initiative develops a 25-year collaborative credit banking process through which tide and floodgate needs are met while also achieving habitat restoration goals for recovery of Endangered Species Act (ESA) listed Chinook salmon in the Skagit River system. Though not formally signed onto the agreement, the collaboration included input from key staff at the U.S. Army Corps of Engineers (Corps); the Washington Department of Ecology (WDOE), and the Washington Governor's Office of Regulatory Assistance. Central to the agreement is the acknowledgement that a maximum of 2,700 acres of delta agricultural lands may be converted to estuarine habitat to be consistent with the goals and objectives outlined by the 2005 Skagit Chinook Recovery Plan developed by WDFW and approved by NMFS.

Lessons from this agreement can help inform recommendations for regulatory streamlining and collaboration efforts in tide gate permitting in coastal Oregon. These lessons are summarized in the list below:

1. Agreement and acknowledgement of common goals among regulatory agencies
2. Inventory of existing habitat

3. Agency acknowledgement of common measurement units
4. Streamlined Regulatory Approach through a coordinated regulatory review process
5. Development of a pre-application informational form
6. Protocols for emergency tide gate repair and replacement
7. Clear definitions for repair, replacement, and removal activities to achieve transparency and establish expectation
8. Creation of Oversight Committee to make sure rules are followed, commitments honored, and are goals reached.

Ultimately, each of these lessons helped inform the recommendations discussed in the final section of this report.

## Research Design and Methods

The research design for this project included four phases. Phase one began with preliminary interviews and data collection. Literature on agency collaboration, streamlining, and environmental management were studied. Additionally, agency websites, legislation, and previous tide gate partnership meeting notes provided by OWEB were read to gain familiarity on the challenges and legal framework in which tide gates are regulated. The objective of this first phase was to obtain a comprehensive understanding of the regulatory and permitting process related to tide gates for each agency. As an outcome of phase one, regulatory maps for each individual agency would be created and used as a deliverable for phase two.

Phase two of the project called for feedback and revision of preliminary regulatory maps with agency staff. In addition to receiving initial feedback from agency staff, phase two planned to include a group meeting with members from OWEB and the Coos and Coquille Watershed Associations. With the watershed associations having a unique position in the community and regular interaction with local land owners, the opportunity to hear their perspective on tide gate permitting from the applicant's view would be valuable. This perspective would help to highlight areas of confusion or excessive burden on tide gate permit applicants and help inform recommendations for regulatory process improvements.

Phases three and four each centered on the opportunity to meet with all regulatory agency staff and OWEB partners during two tide gate partnership meetings. With these meetings scheduled monthly, the invitation was extended by OWEB to present project deliverables. The objective of these meetings would be to present a draft deliverable of a combined regulatory process map in phase three and a second draft with incorporated feedback in phase four. Ultimately, these group stakeholder meetings proved to be most valuable in soliciting feedback and testing the feasibility of streamlining recommendations for the regulatory and collaboration process.

The early data collection, literature review, and interviews outlined in phase one occurred in February and March 2019. Email introductions to agency staff were provided via OWEB and initial interviews were scheduled. These introductions by OWEB staff were effective in initiating contact for interview scheduling. However, it should also be noted that the 2019 Federal Government Shutdown in January and Eugene snowstorm in February each slightly delayed the introductions. Though scheduled for an hour, each interview ranged from 45 to 80 minutes. The interviews that with ODFW and NMFS were due to their more complicated regulatory procedures surrounding fish passage and other ecological factors. Interviews occurred in person at agency offices. Interviewees were asked if they could be recorded to supplement the accuracy of written notes.

The interview script and questions were drafted in collaboration with OWEB. The full script and list of questions are presented in Appendix I. Recordings from interviews are not available as a means to maintain confidentiality. The objective of these initial interviews was to gather information on the current procedures in tide gate permitting from each agency's perspective. Questions centered on uncovering modes of initial contact between tide gate permit applicants and agency staff, identifying the type and amount of information necessary for each agency to obtain from the applicant in order to move through specific steps, and gathering sentiment on what steps of the process that seem to work well versus where challenges are concentrated.

Following interviews with agency staff, individual draft process maps were devised for each of the four agencies. The information gathered from interviews, tide gate partnership

documents, and agency websites were used to create these first drafts. These individual regulatory maps, which represent the current state of tide gate permitting, were submitted to agency staff for review of their accuracy. Each map is each presented in Appendix II of this report. At this stage in the project, scheduling the phase three and four group stakeholder meetings proved challenging. Even with OWEB's persistent support as acting liaison, organizer, facilitator of these meetings, conflicts in agency staff schedules led to multiple postponing of the meetings.

Ultimately, two stakeholder meetings were attended in late May 2019. The first of these meetings was a discussion with three members of the Coquille watershed council. The three members, one OWEB staff, and the principal researcher of this project were in attendance. The objective of this discussion was to gain perspectives from the watershed councils as to how tide gate permitting works on the ground. In many instances, watershed councils work with landowners to develop tide gate projects and acquire the necessary permits. As a result, council staff are very familiar with the feats and challenges in tide gate regulation. Immediately following this small discussion was the larger Oregon Tide Gates Partnership meeting at the Association of Oregon Counties building in Salem, Oregon. This large meeting included stakeholders from industry, state and federal agencies, NGOs, County governments, and a few landowners.

The following day, on May 23<sup>rd</sup>, 2019, the Oregon Tide Gates Regulatory Team convened with staff from OWEB and the principal researcher of this project. The main objective of this group meeting was to present project findings and solicit feedback. Deliverables included the current regulatory process maps (Matrices A-D, Appendix II) and combined theoretical regulatory process map with incorporated recommendations (Matrix E, Appendix II). The group engaged in a discussion of these process maps and strategies for increasing collaboration, efficiency, and alignment in the permitting process. Partners at OWEB facilitated the meeting and included an activity for agency staff to devise a streamlined process.

## Findings: Regulatory Authorities

The findings presented in this section include a description each regulatory agencies' authority, the relevant state and federal statutes, and their internal structure and processes that relate to Tide Gate permitting. The agencies discussed include the Oregon Department of Fish and Wildlife (ODFW), the Oregon Department of State Lands (ODSL), the National Marine Fisheries Service (NMFS) office within the National Oceanic and Atmospheric Administration (NOAA), and the United States Army Corps of Engineers (Corps). Central to this section are the current-state regulatory process maps for each individual agency. These corresponding maps for this section are presented in Appendix II as Matrix A, B, C, and D.

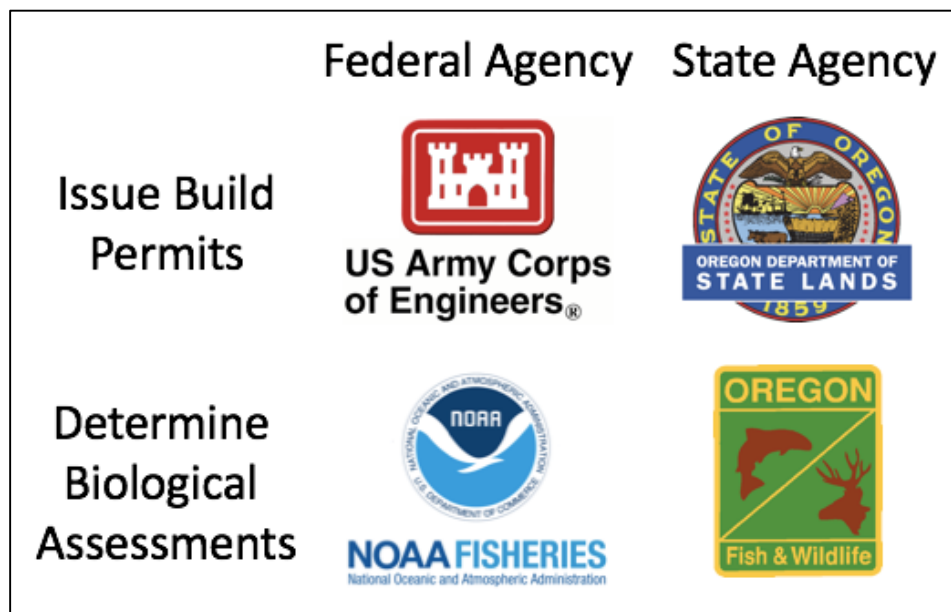


Figure 4: Regulatory authorities involved in Oregon tide gate permitting.



<b>Oregon Department of Fish and Wildlife: (ODFW, Matrix A)</b>
<ul style="list-style-type: none"> <li>• Oregon HB 3002: General Fish Passage Statutes passed in 2001</li> <li>• ORS 509.580-910: Fish Passage criteria required for artificial obstructions</li> <li>• OAR 635, Division 412: Fish Passage criteria and approval procedures</li> </ul>
<b>Oregon Department of State Lands: (ODSL, Matrix B)</b>
<ul style="list-style-type: none"> <li>• ORS 196.795-990: Oregon law for removal and fill of sediment in waters of the state</li> <li>• Joint Permit Application: Single application created by Corps and ODSL to issue their individual permits</li> <li>• General Authorizations: Simplified authorizations for clearly defined projects</li> <li>• Maintenance and Repair Exemption: Exemption criteria for particular tide gate projects</li> </ul>
<b>National Marine Fisheries Services: (NMFS: Matrix C)</b>
<ul style="list-style-type: none"> <li>• Endangered Species Act: Regulates endangered species – includes Chinook and Coho salmon affected by tide gates in Oregon</li> <li>• Magnusson Stevenson Act: Regulates commercially harvested fish and their habitats</li> <li>• Tidal Area Restoration Program (TARP): Programmatic pathway for applicable tide gate projects that achieve habitat uplift</li> </ul>
<b>United States Army Corps of Engineers: (Corps: Matrix D)</b>
<ul style="list-style-type: none"> <li>• Clean Water Act: regulates federal waters and any artificial barriers – including tide gates</li> <li>• Removal Fill Authorization: necessary approval to remove sediment from federal waters or fill sediment into federal waters</li> <li>• Joint Permit Application: Single application created by Corps and ODSL to issue their individual permits</li> </ul>

Table 1: Regulatory authorities involved in Oregon tide gate permitting.

## Findings: Discussion of Challenges

Many of the challenges with tide gate permitting were described by agency staff during in person interviews. Others became apparent through research and attempting to combine the regulatory process maps for each agency. Those challenges, potential conflicts, and existing concerns with tide gate permitting are described. This section concludes by providing guiding themes as a way to frame potential solutions to the permitting process.

One of the greatest challenges with tide gate permitting is the mix of regulatory authorities and stakeholders that become involved in any single project. However, this mix is

not unique to tide gates. Many infrastructure repair and construction projects trigger a multitude of environmental regulations from across jurisdictions. This is true in Oregon and many other states in the US. What makes tide gates difficult to permit is the mix of design criteria, conflicting recommendations, and seemingly different goals of each agency. For example, with respect to tide gates, ODFW is most concerned with fish passage for the 32 native migratory species. Administering the Endangered Species Act, NMFS is most concerned with two endangered Salmonoids, Chinook and Coho. Though fish passage is important, NMFS is most concerned with habitat uplift behind a tide gate for those listed species. These small differences in objectives have larger implications that effect each agency's processes and timelines. Consequently, aligning these procedures has been one of the greater challenges with tide gate permitting. Furthermore, when combined with owner goals for their property, NMFS and ODFW have struggled to give congruent design criteria that achieves full fish passage and habitat uplift.

One option to address these complexities is address conflict outright and simplify goals when possible. With any collaboration, clear identification of team goals and objectives is necessary to begin the process. Though agencies may think their processes and rules are vastly different from one another, they actually share many common characteristics. Simply put, both NMFS and ODFW are interested in protecting fish and fish habitat. Though it seems trivial, acknowledgement of these common goals prior to collaboration is especially important. This might mean agencies engage in a framing exercise or develop a team agreement with common and agreed upon goals explicitly written. Similarly, smaller goals can be written down for each step of the permitting process. For example, agency staff have already recognized the importance of a group site visit to hear the land owner's project goals. This group visit is also an opportunity to collect important habitat and ecosystem data. Having each agency write down exactly what they are looking for and hope to get out of a site visit can help make this process step more efficient. This clarity can help reduce unnecessary redundancies later on in the process. Ultimately, these types of collaboration tools build trust between agencies, allow for congruent processes, and result in more effective collaboration that benefits the applicant.

Another challenge with tide gate permitting is limiting the burden on applicants. Though the regulatory agencies have a duty to enforce relevant statutes, they have also struggled to keep the burden of enforcement on the applicant minimal. This is especially pertinent given that many tide gate owners are coastal farmers. In many cases, these farmers have owned their land for generations or have a general distrust of state and federal regulators. One of the concerns repeatedly mentioned in interviews was that some farmers may repair or replace their gates without a permit. In doing so, owners are likely to disregard fish passage and degrade the habitat and ecosystem. Agency staff described this scenario as extremely likely given the complicated nature of the current regulatory process. With this in mind, any reform to tide gate permitting needs to keep the applicant perspective at front. Processes need to be made transparent and centered on building applicant trust so regulatory objectives can be achieved.

A specific challenge alluded to earlier is the financial burden for applicants. Even if an applicant is willing to make changes to their tide gate for full fish passage and habitat uplift, the high monetary cost of gate design can discourage an owner's willingness to engage in projects. Once again, many of the owners of these tide gates are individual land owners or farmers. These applicants that may be more cost sensitive than a utility company or local jurisdiction involved in similar infrastructure projects. However, the high cost of gate design creates two opportunities for an improved process. First, agencies need to recognize these costs and be clear and upfront as to what funding is available to an applicant. Even though agencies like the Corps and ODSL do not offer funds for tide gate projects, they should at least identify contacts and help point an applicant in the right direction. NOAA and ODFW, both of whom do have funding channels for restoration and technical assistance, should develop internal connections and pathways to quickly leverage these funding sources to aid applicants. Second, agencies have an opportunity to develop a process wherein funding sources are an incentive for applicants to choose certain regulatory pathways. Though sometimes tricky to administer, monetary incentives for altering applicant behavior can be an effective streamlining tool.

The final challenge discussed is that relating to longevity and process resilience. Whatever changes are made to the tide gate permitting process should be well documented

and reflected upon by participating agencies. A guiding question for this challenge is how will the system and process hold in the future? Information collected during projects should be appropriately logged and classified consistently across agencies. A well documented classification system has a number of benefits. For example, it can allow for process resilience in case of employee turnover. Documentation of formal and informal agreements, shared goals, and guidelines can each ensure the longevity of an effective collaboration. This documentation is also critical for post-collaboration reflection. One of the challenges of making changes to a collaborative process is determining what works well and what may need additional changing. The simple acknowledgment that effective collaboration may be iterative is beneficial for agency trust and sets the stage for future streamlining in tide gate permitting.

As a result of this research on tide gate permitting, four key themes for efficient regulation emerge. Those include 1) Collaboration between agencies and landowners, 2) Identification of goals, 3) Transparency of processes, and 4) Agency acknowledgement of iteration. The following section describes how each of these themes relates to tide gate permitting. Lastly, recommendations that correspond to each theme are provided to better leverage inter-agency collaboration and make tide gate permitting more effective.

## Recommendations to Better Leverage Inter-Agency Collaboration

This section outlines five recommendations for how to more effectively leverage inter-agency collaboration for an efficient Tide Gate permitting process. Recommendations emerged from a combination of research of other regulatory streamlining efforts as well as the completion of the four current regulatory process maps for each individual agency. Once these maps were completed, there were key areas where the opportunity for process alignment became more visible. As a result, each of these recommendations relate to the larger themes of efficient regulation discussed in the previous section. Central to this section is Matrix E: Recommended Tide Gate Partnership Regulatory Process Map in Appendix II. This map incorporates each of the recommendations discussed in this section. The list below in Figure 5 shows each theme for efficient regulation and its corresponding recommendation for tide gate permitting.



## **Collaboration between agencies and landowners**

Rec 1: Pre-Application form



## **Identification of goals**

Rec 2: Group Agency Site Visit



## **Transparent processes**

Rec 3: Project-specific funding criteria



## **Agency acknowledgement of iteration**

Rec 4: Post project evaluation form

Figure 5: Themes and Recommendations for an effective permitting process

### [Recommendation 1: Develop Pre-Application Form](#)

One of the common challenges with Tide Gate Permitting is the lack of introductory information for an applicant. Regardless of which activity the owner may or may not pursue with regards to their tide gate, there is very little information for them to find on their own prior to speaking with a staff member. This initial point of contact, or in this case, pre-contact, is crucial as it determines how much knowledge the applicant has going into a project. One problem noted from agency staff with initial contact is the varying level of project development from an applicant prior to them seeking external information. Some applicants appear to initiate contact immediately after they decide they want to take some action with their tide gate. Other applicants may hire a consultant or try to fully develop their project plan on their own prior to contacting any individual from any agency. In these instances, applicants may have to rework their entire project plan once they become familiar with fish passage regulation and design criteria. This reworking can become a significant cost or time burden for an applicant and result in frustration and distrust from a project's onset.

A proposed solution to converge this range of initial contact is to develop a Pre-Application Form. The information on this form would include relevant data pertaining to the existing structure and potential actions or goals desired by the applicant. The form should

solicit information that doesn't require any technical assistance or complicated analysis. This might include height, width, material, age, and placement in watershed of existing tide gate. The common thread with all information asked on this pre-application form is that it can be confirmed, rather than first acquired, later in the process during a group site visit. Gathering this information on a document earlier in the process allows the group site visit to be most efficient in gathering pertinent ecological data, communicating agency goals, and determining applicant objectives.

The Pre-Application Form is also an opportunity for earlier and more targeted collaboration among the regulatory agencies and other organizational stakeholders. Prior to deployment, each agency should have the opportunity to add questions to this form. However, the document must also remain short and concise so it does not become burdensome for the applicant. The Pre-Application Form must be consistent and easily accessible on every agency and organizational stakeholder's website. Agencies and stakeholder organizations should commit to ask an applicant to fill out and submit the Pre-Application Form as soon as an applicant initiates contact with that external partner.

All Pre-Application Forms should also include a unique Tide Gate Project Identification Number. Agencies should commit to using this Project ID from start to finish and at all stages of the regulatory process. A common identification system will allow agencies to most effectively share data and tie project updates to that common ID. The Pre-Application Form and the Project ID also serve as a consistent file of information unlike an Individual Joint Permit Application (JPA: Appendix III) or General Authorization (GA: Appendix III). In some instances, applicants may have to resubmit and revise permit applications. Consequently, the pre-application form and Project ID can replace the JPA in serving as an anchor file for any single tide gate project. Furthermore, the Pre-Application Form and Project ID can provide basic information to supplement and update the Oregon Statewide Tide Gate Inventory.

Ultimately, the Pre-Application Form is effective in initiating early collaboration between agencies, providing consistency of early site characteristics and data, serving as an anchor document for future project updates, allowing for long-term consistency of project monitoring, and providing a clear entry point for any Tide Gate owner and potential applicant. This

recommendation appears in Matrix E with the early step of requesting applicants fill out the pre-application form. The use of the Project ID also frequently appears in Matrix E.

### Recommendation 2: Group Site Visit and Communication of Consistent Goals

The second recommendation for streamlining the regulatory process is ensuring the Team Activation and Group Site Visit between ODFW and NMFS. Though ODSL and the Corps are essential members of the Team Activation process, their presence during the Group Site Visit is less critical than that of the agencies regulating fish passage and habitat. The need for a group site visit is one that had also been identified by the Tide Gate Regulatory Working Group prior to the beginning of this Project. This recommendation underlines the importance of that group visit. This group visit is essential in limiting redundancy of data collection and communicating clear and consistent agency goals, and hearing applicant. The group site visit is also essential in building relationships between agency staff and the applicant. Each agency should prioritize the group site visit as a means to begin an effective collaboration process. The Partnership Team must also ensure the site visit occurs at an appropriate time after an applicant makes a request or submits a Pre-Application Form. Group visits following a submittal of a Form should happen as soon as possible. Visits should not occur a ODFW and NMFS should also be clear with one another in exactly the type of data they wish to acquire and how they will use it. Though each agency is only responsible to their own mission and statutes, there is a clear overlap in the type of habitat and fish species data. Clear acknowledgement of this overlap and each other's goals is a building block of more effective collaboration. The placement and objectives of the group site visit are clearly illustrated in Matrix E of Appendix II.

### Recommendation 3: ODFW and NMFS Provide Clear and Transparent Funding Criteria

Another stated challenge in tide gate permitting is allowing time for the applicant to decide what action they wish to pursue with their project. With any tide gate project, there is variance of cost dependent on activity. Agencies have a responsibility to communicate to the applicant which project pathways and corresponding criteria are likely eligible for funding.

Those agencies, including ODFW, and NOAA need to be transparent and especially clear in that communication. Each agency should make efforts to develop project specific criteria and pathways that would provide funding. Much of this criteria development requires internal coordination from agency staff. For example, NMFS has funding allocated in a separate branch at the NOAA Restoration Center. To access this funding, NMFS may communicate with colleagues at the Restoration Center. NMFS project staff that may be involved in tide gates should aim to gather clarifying information and build relationships with staff at the NOAA Restoration Center to more effectively leverage funding those opportunities for applicants. Similarly, ODFW should continue to develop their Priority List of tide gate projects and be transparent with applicants where their project falls on that list.

Once potential funding has been identified, each agency should develop clear project-specific criteria that incentivizes an applicant to pursue full fish passage (per ODFW) and habitat uplift (per NMFS). As shown in Matrix E of Appendix II, the most preferred pathway of all regulatory agencies is one where the applicant qualifies for NMFS' programmatic permit approach called the Tidal Area Restoration Program (TARP). Developed by NMFS and the Corps, this programmatic provides a quicker timeline for permit authorization if a tide gate project can achieve habitat uplift and full fish passage. If NMFS and ODFW obtain the authority and flexibility to define funding criteria for a project, they can set it to incentivize applicants to pursue this programmatic pathway.

#### Recommendation 4: Alignment of Section 7 Consultation and State Public Comment Period

A fourth recommendation for more effective permitting is an alignment of the Section 7 Consultation and State Public Comment Periods at the end of the regulatory process. Current processes and some previous tide gate projects began with applicants submitting a Joint Permit Application. When this happened as Step 1, NMFS and ODFW only first engaged with the applicant and their project after this submittal. As discussed earlier, bringing these two regulatory agencies to the table prior to an application being submitted is crucial. Only after an applicant has consulted with the Project Team and determined a project pathway should they



be encouraged to submit a Joint Permit Application (or General Authorization packet depending on project pathway). As a result, the Section 7 Consultation between the Corps and NMFS and Public Comment Period initiated between ODSL, ODFW, and other organizations, can happen congruently and toward the end of permitting process. These processes are already very similar. Each are an opportunity for the State and Federal agencies responsible for fish passage to provide their biological assessment and determination of project compliance with applicable species statutes. By aligning these processes, any concerns with a project can be addressed together. Consequently, the applicant can resubmit only one application that incorporates appropriate changes and responses to all issues or concerns.

#### Recommendation 5: Develop Project Evaluation Form and Effectiveness Score Card

The final recommendation for ensuring an effective collaboration of Tide Gate permitting process is the development of a post-project reflection tool. Specifically, agencies should jointly develop an evaluation form and effectiveness score card that each agency must complete following the issuance of a permit. Additionally, a similar evaluation form should be provided for applicants following the issuance of their permit. After any collaboration process with multiple stakeholders, it is essential to evaluate what was effective and ineffective in the collaboration. These evaluation forms can maintain effectiveness of the collaboration and help identify early signs of problematic trends. An external partner, such as the Oregon Watershed Enhancement Board, can administer the collection of these forms. Ultimately, involved agencies should commit to completing these forms and use them as an improvement tool for future projects during Tide Gate Partnership Meetings.

#### Research Implications

This report is written to satisfy the requirements of the Professional Project for the Master of Community and Regional Planning program at the University of Oregon. However, additional documents are tailored specifically for the Oregon Watershed Enhancement Board

and the regulatory agencies involved in the Tide Gate Partnership. These deliverables include each of the individual regulatory maps (Appendix II: Matrix A-D) and the combined recommended regulatory map (Appendix II: Matrix E).

Though the author of this report concludes his involvement with this project in June 2019, the Tide Gate Regulatory Partnership is expected to continue into the foreseeable future. There is a clear opportunity for additional research in mapping the regulatory process and detailing the effectiveness of this inter-agency collaboration effort. Noted earlier, one component of this project that is especially lacking is the perspective of the tide gate owner. Though there was an opportunity to discuss with watershed council staff the challenges in tide gate permitting, this is still a perspective that is one degree of separation from the land owner. A thorough investigation into the perspectives and challenges faced by individual tide gate owners would be especially valuable in enhancing these project recommendations and creating a more effective tide gate permitting process in Oregon.

The research design and process of this professional project is one that also has implications for future studies. The first conclusion from this research design is that working with a collaboration of agency staff can be challenging. In addition to differing perspectives between staff from separate agencies, there were times where multiple staff from the same agency were in disagreement. For example, this became clear during the regulatory working group meeting when going over the current process maps for each agency. Though the current process map for NOAA had gone through multiple iterations of review by a NOAA staff member, other staff from NOAA interpreted the steps differently. The discussion that followed added another layer of complexity to the regulatory meeting.

Varying perspectives within an agency is unlikely unique to NOAA. Many agencies may experience this due to staff having different backgrounds, training, or job responsibilities. Furthermore, regulations or procedures may often be vague and leave room for staff interpretation. However, when the opposite occurs and regulations become too strict, staff may lack the flexibility to adapt to unique circumstances. Future researchers should note these variations and consult multiple staff from each agency to confirm regulatory processes. Had this

been noted for this project, the regulatory working group meeting would have likely been more effective in discussing future solutions rather than the accuracy of current procedures.

Another implication that arose from this research process was that the interview questions for agency staff were not always answered or helpful in understanding the regulatory process. These questions, presented fully in Appendix I, were aimed at uncovering how staff characterized the current process. For example, questions included: What is the most important outcome or set of outcomes your agency wants to achieve through the regulatory process? What is working well with tide gate permitting? What areas of the process would benefit from more or less agency collaboration? Most staff gave their answers describing step by step procedures, applicable statutes and regulatory authorities relating to tide gates, and the Tide Gate Partnership work completed prior to the beginning of this project. Though the interviews were less valuable in illuminating recommendations for streamlining than expected, they were incredibly helpful in getting a sense for the regulatory process. However, it was the actual exercise of creating process maps for each agency and comparing one another that was most helpful in highlighting those target areas for efficiency. When combined with existing literature on effectiveness of permitting and collaborative processes, these maps were what prompted the recommendations in this report.

Lastly, it should be noted that the regulatory working group meeting in May did not go as planned. The agenda of this meeting had three main parts. First, the goal was to present the current regulatory process maps. Second, agency staff were to create their own combined process map on a large sticky wall where each process step for each agency had been pre-cut and placed. Then, the combined recommended process map, presented here in Matrix E in Appendix II, would be revealed and compared to the map created by staff in step two. Through these parts, it was surmised that agency staff would have ownership over their own regulatory process, get to interact with one another, and compare their ideas for efficiency to those recommended this report.

However, and as mentioned earlier, many of the current regulatory process maps were less accurate than originally thought. As a result, the time spent early on in the working meeting was allocated to making current process edits. During this exercise, agency staff

repeatedly wanted to make adjustments and suggestions for a recommended process. However, staff at OWEB insisted that the time for these suggestions would come later with the sticky wall activity. Unfortunately, the sticky wall activity proved very challenging. First, the wall was completely covered and too crowded to get a sense of what the steps were. With each step cut out and listed horizontally, rather than vertically as shown in Matrices A-D, it was challenging for the eye to follow. Agency staff struggled where to even begin with moving the steps around and ultimately spent the hour instead challenging OWEB to find a better use of time. This was in part because the setup of the meeting room didn't allow space for staff move around together. Staff also thought that much of their discussion around the current process maps had already covered the topic of how to build a more efficient process map. One conclusion from this exercise is that it is far easier to create an efficient process map while looking at current maps of each agency. Furthermore, trying to combine all the steps from each agency is too overwhelming of a task. The remainder of the working meeting was spent making a list of recommendations and highlighting areas for alignment. Though some of these had been previously raised during the discussion of the current process maps, additional progress was made with other recommendations.

The meeting concluded with a list of recommendations and areas where additional work was needed. For example, OWEB and agency staff noted that local government regulation and the Oregon State Historical Preservation Office would need to be contacted and have their own process maps added to the collaboration. The meeting also concluded without the opportunity to discuss or present the combined regulatory map (Matrix E) that is central to this project report. However, all five of the recommendations discussed in the previous chapter were, to some degree, discussed and suggested by agency staff. This is a positive sign that both the agency collaboration and the research in this report are pointing in the right direction and hopefully a sign of a more streamlined permitting process to come for tide gates in Oregon.

Ultimately, this project highlights regulatory streamlining and collaboration efforts as a means to increase the efficiency and effectiveness of tide gate permitting in Oregon. This project does so by visually mapping the regulatory processes of NMFS, Corps, ODFW, and ODSL. As a result of the mapping exercise, the review of literature on regulatory streamlining, and the

discussions with stakeholder organizations yielded a combined process map with accompanying recommendations. The feasibility of many of these recommendations are already being discussed by OWEB and agency staff in the Tide Gate Partnership. Looking ahead, these current process maps and recommendations will play a role in helping Oregon maintain the operation of tide gates and improve the health of Oregon watersheds and coastal ecosystems.

## Appendices

Appendix I: Agency Interview Questions

Appendix II: Maps

Matrix A: ODSL Map

Matrix B: ODFW Map

Matrix C: Corps Map

Matrix D: NMFS Map

Matrix E: Combined Recommended Map

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Figure 1: Coos Watershed Association.

Figure 2: Environment Agency, United Kingdom. Accessed May 31<sup>st</sup>, 2019:  
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Figure 3: Partnership for Coastal Watersheds. Accessed May 31<sup>st</sup>, 2019:  
(<http://www.partnershipforcoastalwatersheds.org/human-infrastructure-in-the-lower-coos-watershed/>)

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## Appendix I: Agency Interview Questions

- Explain to me the role that your organization has in Tide Gate permitting.
  - Explain to me your personal role in Tide Gate permitting.
  - How do Tide Gates fit in the authority of your organization?
- What is the most important outcome or set of outcomes you want to achieve through your regulatory process?
- What are the ways in which an applicant can make initial contact?
  - Who is on the receiving end of this initial contact?

- In the *current* permitting system, after initial contact is made, what process or processes are triggered?
  - In what order?
  - What is the turnaround/timeline for this next step?
  - In a *desired future* permitting system, after initial contact is made, what process or processes are triggered?
- What is the list of information of data you need from a tide gate owner to proceed?
  - Of this, what information is most critical for your decision-making process?
- What financial and resource support is available to applicants?
  - What criteria is needed to receive this support?
- Within your organization, how many individuals become involved (start to finish) in a Tide Gate permit proposal?
- At what point(s) does your organization need additional information from an external agency or organization?
  - What information are you seeking in particular?
  - From how many additional organizations do you need information?
- At what point(s) does your organization provide information to another agency/org?
  - What information are they seeking?
  - How many organizations request information?
- What is the typical range of time of each of the permitting process stages?
  - What stages of the permitting process take the longest period of time?
  - Who is responsible for completing each stage?
- What is working well right now with Tide Gate permitting?
- What areas of your process would benefit from better coordination with other permitting agencies?
  - What do you see as the greatest internal challenge with permitting?
  - What do you see as the greatest challenge to applicants with the permitting process?



# Appendix II Matrix A: Oregon Department of Fish and Wildlife (ODFW)

Applicant Action:
Repair Tide Gate
Replace or Install new Tide Gate
Remove or Abandon Tide Gate

\*Certain repair actions that are 50% or below (cumulative) do not meet "trigger event" definition and would be exempt.

All actions meet definition of "trigger event"  
for Oregon Fish Passage Statutes  
(Defined in ORS 509.580-910 and OAR 635 Division 412)

Applicant contacts ODFW of Tide Gate related trigger event.

ODFW confirms if applicant action meets trigger definition and ODFW answers additional questions from applicant.

Site Visit: Native Migratory Fish Determination by ODFW biologist on site.

- Which of 32 species currently or historically present? Life history stages? Migration timing of species?
- What design is necessary to allow passage for weakest fish?

Based on determination, ODFW provides appropriate design criteria to applicant.

Applicant submits Permit Applications (ODSL, Corps, ODFW, etc.)

ODFW receives Fish Passage Plan from applicant or ODSL.

If incomplete OR criteria not met, applicant notified and given opportunity to provide more information and/or address issues in revised Plan.

ODFW reviews Fish Passage Plan for completeness of information.

In rare circumstances, waiver or exemption to fish passage may be applicable and approved.

ODFW reviews Fish Passage Plan for approval in meeting criteria.

If criteria met, ODFW issues approval of Plan to owner/operator.

ODFW sends notification to ODSL and NMFS of approved fish passage as warranted.

Compliance Monitoring.

# Appendix II Matrix B: Oregon Department of State Lands (ODSL)

**Applicant**

**Action: Remove, Repair, Replace, or Install new Tide Gate**

**Exempt from Permit if criteria met:**

If criteria not met →

**DSL Individual Permit Application:**

- Meets one or both of the following definitions:
1. Maintenance: "periodic repair or upkeep of a structure in order to maintain its original use"
    - includes a structure being widened by no more than 20% of its original footprint if necessary to maintain its serviceability
    - includes removal of minimal amount of sediment either within, on top of, or immediately adjacent to a structure necessary to restore its serviceability
    - must be functional within last five years
  2. Reconstruction: "means to rebuild or replace an existing structure in kind"
    - includes structure being widened by no more than 20% of its original footprint
    - must be functional within last five years.

**Application Completeness review (30 days)**

**If complete: letter/email of Completion sent to applicant**

**If incomplete: letter/email of Incompletion sent to applicant with Checklist of missing information (including fee information)**

**Public Review Period Begins (30 Days)**

ODSL sends letter or emails asking for comments to:

- ODFW
- NMFS
- Adjoining property owners
- Tribal Governments
- Other State/Federal Agencies
- Interested NGOs

**After all comments received, ODSL begins Final Review Period (60 Days)**

**ODSL prepares and emails Comment Letter to applicant with all comments received.**

**Applicant reviews comments and may need to alter project if necessary per ODSL or ODFW regulation or other comments.**

Applicant may request extension to resolve issues with design.

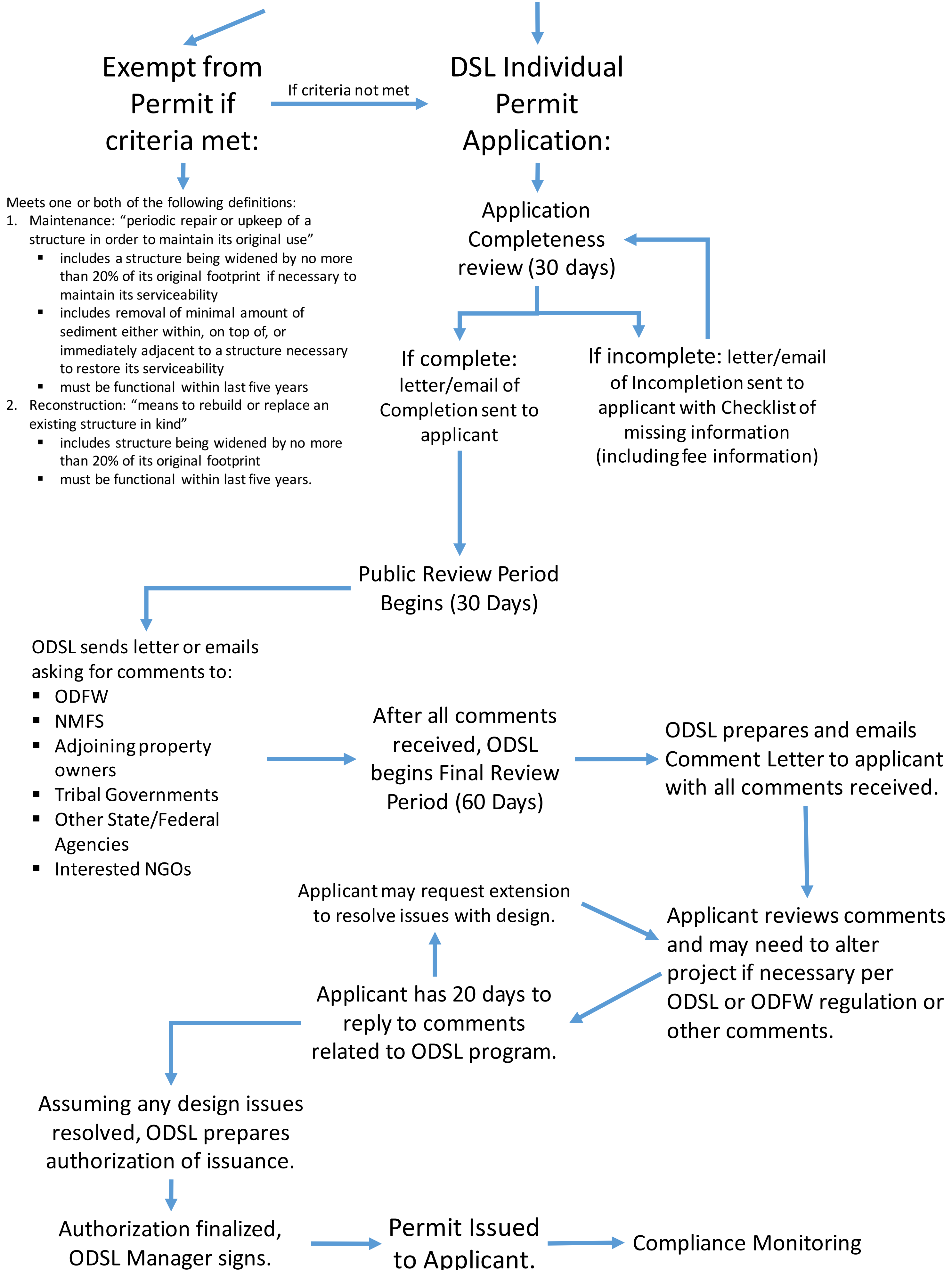
Applicant has 20 days to reply to comments related to ODSL program.

Assuming any design issues resolved, ODSL prepares authorization of issuance.

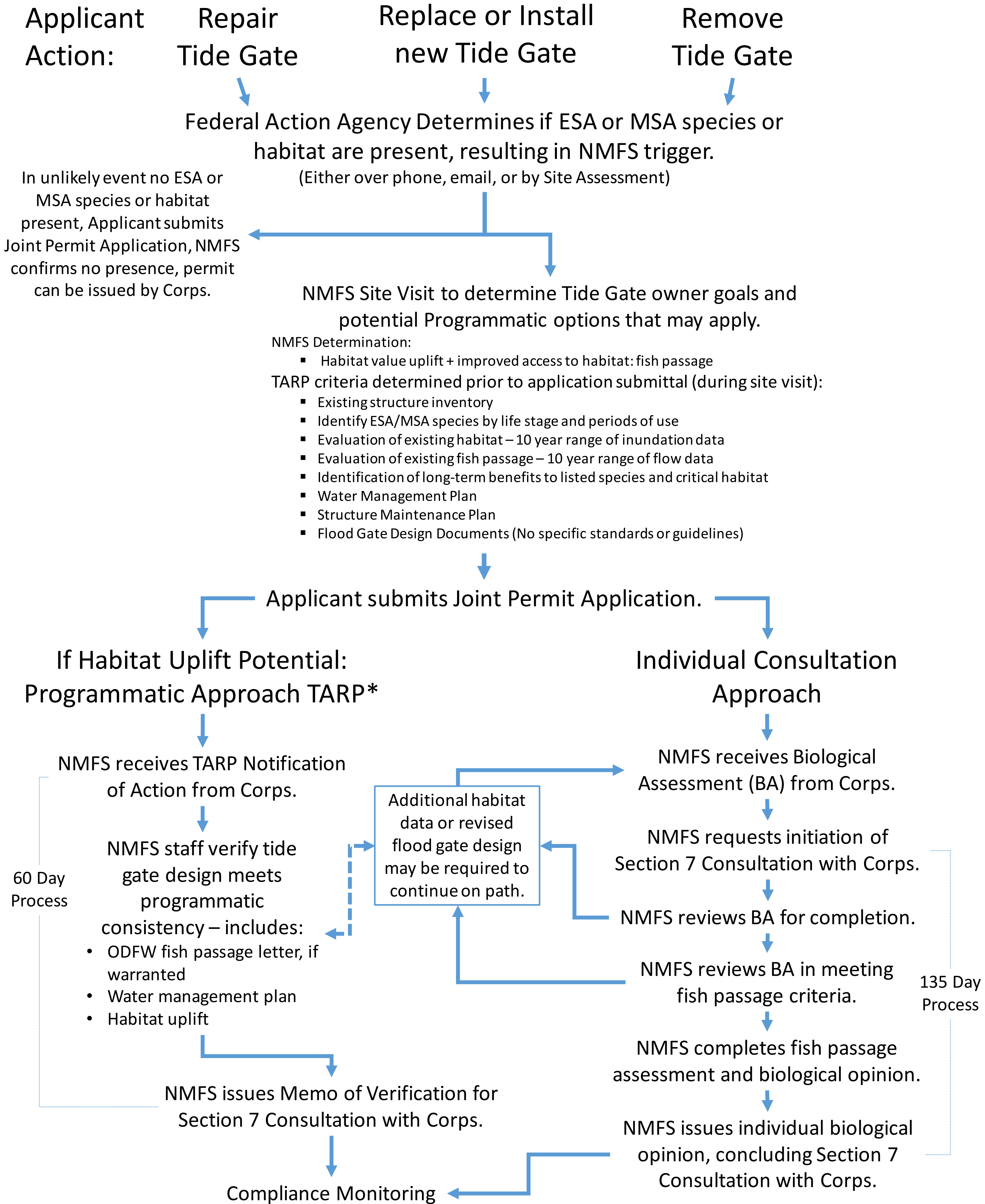
Authorization finalized, ODSL Manager signs.

**Permit Issued to Applicant.**

**Compliance Monitoring**



# Appendix II Matrix C: NOAA National Marine Fisheries Services (NMFS)





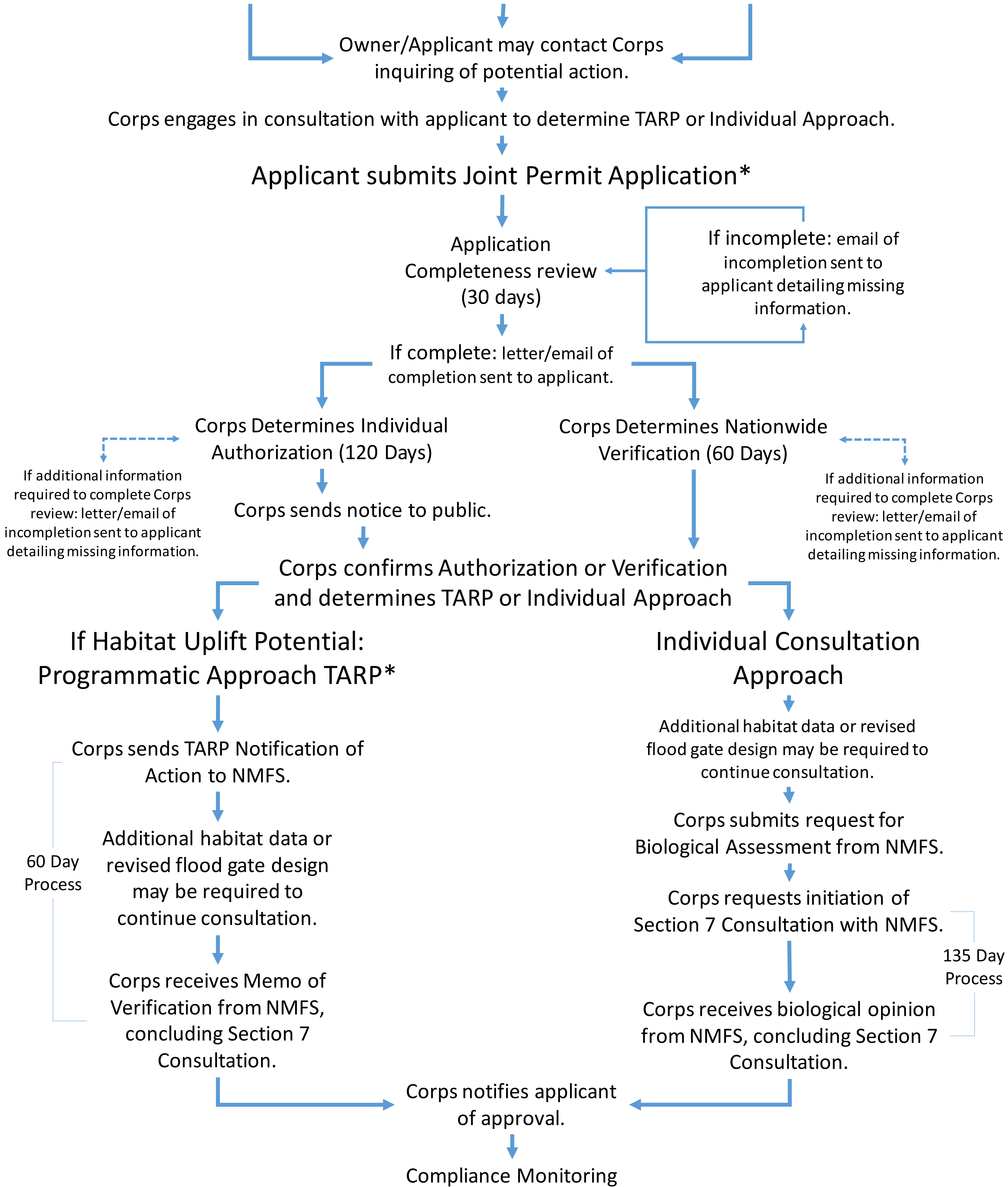
# Appendix II Matrix D: US Army Corps of Engineers (Corps)

**Applicant  
Action:**

**Repair  
Tide Gate**

**Replace or Install  
new Tide Gate**

**Remove  
Tide Gate**



# Appendix II Matrix E: **Recommended** Tide Gate Partnership Regulatory Process Map

Owner Wants to Repair, Replace, Install, or Remove Tide Gate

Owner attempts to complete Joint Permit Application but sees pre-application worksheet recommendation.<sup>1</sup>

Owner notifies OWEB, ODSL, Corps, ODFW, NMFS, or Watershed Council of potential project.

Original Point of Contact notifies agencies for **Team Activation** and provides applicant Pre-Application worksheet.

Owner completes **Tide Gate Pre-Application** worksheet either over phone with Point of Contact or submits via email.

- Where is Tide Gate in watershed?
- What ESA or MSA fish species is the applicant aware of on site?
- What are the owners goals for the site?
- Does the owner need or expect to seek out funding?
- Age, condition, material, use of Tide Gate?
- Tide Gate Project ID# Assigned to owner

NOTE: (Owner can choose to skip this step and move to site visit from Partnership Agencies)

**Group Site Visit** to Achieve Following Goals:

- What are owner goals for site?
- Does the owner need or expect to seek funding?
- NMFS Determines:
  - What ESA or MSA fish species present?
  - What level of inundation does the applicant desire or is willing to allow?
  - What is Habitat Uplift Potential?
  - Will and how can project qualify for TARP?
- ODFW Determines:
  - Which migratory species currently and historically present?
  - What is Priority Level of site and potential for cost share funding for project?
  - What tide gate design criteria are likely to be needed for weakest fish?

Post Site Visit **Identification of Funding Options:**

- NMFS provides applicant with criteria to meet threshold for funding from NOAA Restoration Center
- ODFW provides applicant with criteria to meet threshold for 60-40 Cost Share based on Priority Level

**Ultimately, what are Gate Design options to:**

- 1) Achieve habitat uplift to qualify for TARP
- 2) Meet fish passage criteria for relevant migratory species?

Project Team works with Tide Gate Owner to help them reach decision on project pathway.

Project Team commits to clear, timely, and effective internal communication while adding project updates to Project ID# file.

Tide Gate Owner makes decision and submits **Joint Permit Application** with included:

- Fish Passage Plan
- Tide Gate Design
- Pre-Application Form with Project ID#
- Indication if they expect to qualify for TARP

If no ESA or MSA fish or habitat present, NMFS exits Project Team and readies documents for Section 7 Consultation with Corps.

If no migratory fish species current or historically present, ODFW exits Project Team and readies comments for Public Comment Period with ODSL.

Corps and ODSL Review JPA for completeness and notify NMFS and ODFW of submittal via Project ID#

Project qualifies for TARP with Habitat Uplift and meets Fish Passage Criteria.

Project does not qualify for TARP without Habitat Uplift but still meets Fish Passage Criteria.

Project does not qualify for TARP without Habitat Uplift and fails to meet Fish Passage Criteria.

# Recommended Tide Gate Partnership Regulatory Process Map (continued)

Corps and ODSL Review JPA for completeness and notify NMFS and ODFW of submittal via Project ID#

Project qualifies for TARP with Habitat Uplift and meets Fish Passage Criteria.

Project does not qualify for TARP without Habitat Uplift but still meets Fish Passage Criteria.

Project does not qualify for TARP without Habitat Uplift and fails to meet Fish Passage Criteria.

ODSL determines whether project needs **Individual Permit** or meets maintenance or reconstruction criteria for **Exemption Waiver**.

Note: ODFW and NMFS engage in Fish Passage and Programmatic Review regardless of ODSL pathway.

ODSL initiates 30 Day Public Comment Period and sends Fish Passage Plan and Gate designs to ODFW.

Corps submits TARP Notification of Action to NMFS, initiating Section 7 Consultation.

ODFW reviews Fish Passage Plan and Tide Gate Designs for completeness and meeting passage criteria.

NMFS staff verify tide gate design meets programmatic consistency including:

- ODFW fish passage approval letter
- Water management plan
- Habitat Uplift

ODFW issues Approval of Plan to owner/operator and forwards to NMFS and ODSL.

30 Day Process

ODSL authorization prepared and signed by ODSL Manager.

NMFS issues Memo of Verification for Section 7 Consultation with Corps.

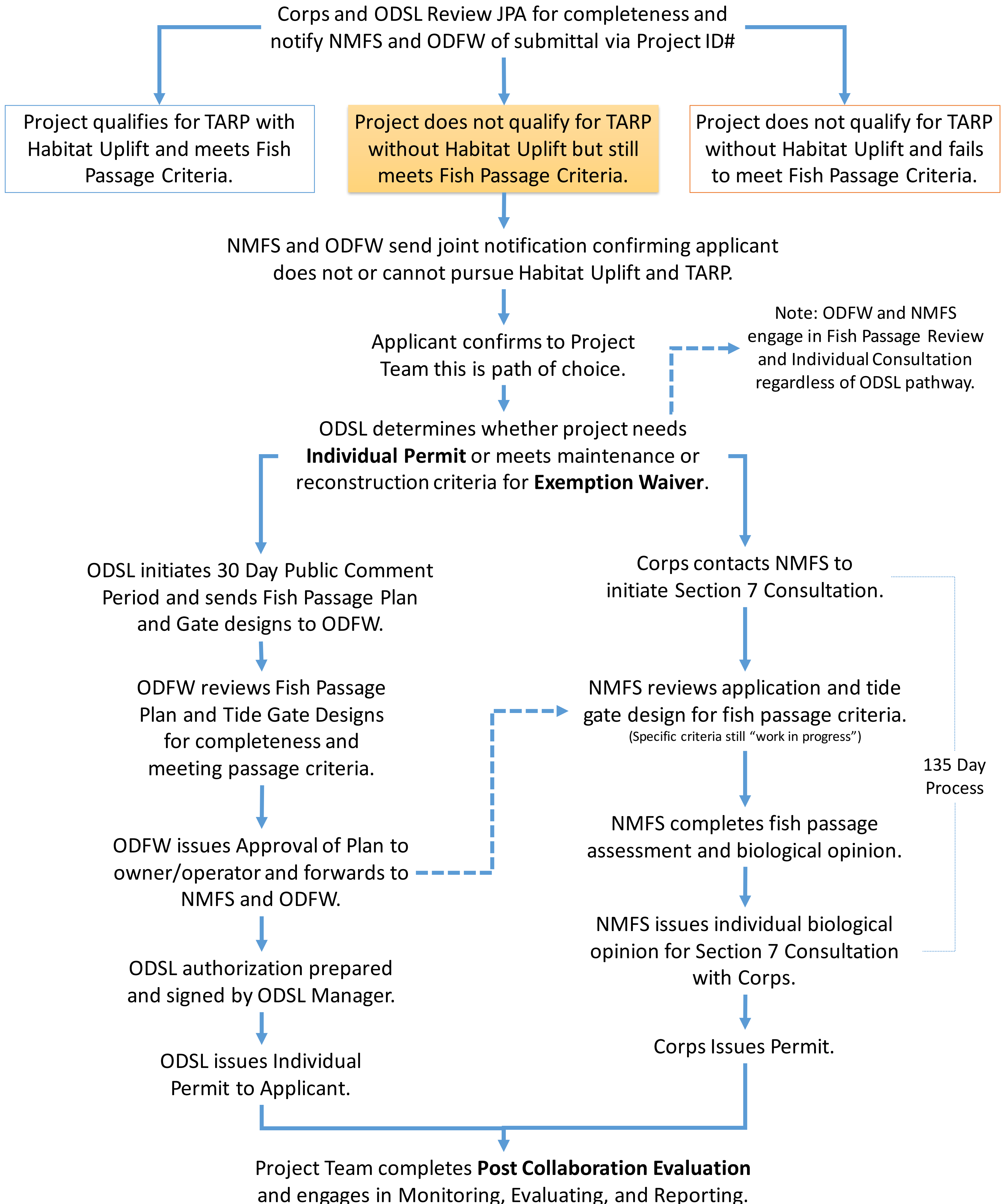
ODSL issues Individual Permit to Applicant.

Corps issues Individual Permit to Applicant.

Project Team completes **Post Collaboration Evaluation** and engages in Monitoring, Evaluating, and Reporting.



# Recommended Tide Gate Partnership Regulatory Process Map (continued)



# Recommended Tide Gate Partnership Regulatory Process Map (continued)

