



A PROPOSED POLICY APPROACH FOR SMARTER FLOODPLAINS MANAGEMENT IN OREGON

March 2017

Purpose of Policy Brief: Describes an alternative route to effectively implementing the BiOp in Oregon, and defines federal, state and local roles, responsibilities, and policy tools.

1 INTRODUCTION AND BACKGROUND

History and Overview of the Biological Opinion

On April 14, 2016, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NMFS) released a Biological Opinion (BiOp) analyzing the Federal Emergency Management Agency's (FEMA) implementation of the National Flood Insurance Program (NFIP) in Oregon. The BiOp concludes that FEMA's implementation of the NFIP will jeopardize the continued existence of 16 anadromous fish species and Southern Resident killer whales listed as threatened or endangered under the Endangered Species Act (ESA). For this reason, the BiOp includes a "reasonable and prudent alternative," (RPA) that proposes both interim and long-term measures that could bring FEMA's implementation of the NFIP into compliance with the ESA and promote the recovery of listed fish species.

The RPA is primarily focused on actions FEMA would take to change implementation of the NFIP, including revision of FEMA's regulations that define the minimum floodplain management requirements that local communities must meet to participate in the NFIP. However, several of the interim measures would require direct action by local communities and/or the state. Specifically, the RPA recommends that communities:

- Limit development within the highest-risk portions of the regulatory floodplain to water-dependent uses, habitat restoration activities, or development actions that are fully mitigated to provide net conservation gain;
- Require compensatory mitigation of impacts to flood storage, riparian vegetation, and stormwater infiltration to a "net benefit" standard within that same area; and
- Limit increases in impervious area through the floodplain and require lower-impact development practices to improve stormwater infiltration.

The long-term measures, if fully implemented, would involve FEMA requiring communities to take a very similar set of actions as a condition of participation in the NFIP, and also include improved mapping and other direct actions by FEMA to help communities assess and manage both flood risk and impacts to listed fish and their habitat.

Opportunities and Challenges

Implementation of the BiOp creates significant opportunities and challenges for local communities and for the State of Oregon. Improved flood hazard mapping and the emergence of a clear policy driver to motivate land use decisions can help counties and cities make better and more informed decisions about whether and how to allow continued development in floodplains. Directing development away



from the highest-risk areas and requiring effective compensatory mitigation would likely result in better public safety, environmental, and even economic outcomes in many flood-prone areas. However the approach outlined in the BiOp also faces challenges ranging from litigation and political pressure at the local, state, and federal level to the practical realities of finding a route to implementation that fits the states existing legal framework around land use and the limited capacity of many municipalities to address complex technical and policy requirements.

For the BiOp to meet its potential for improved ecological, economic, and social outcomes, implementation will need to provide a viable route forward for a very diverse set of Oregon communities, including those that face significant hurdles because they, for example, have no potential for boundary expansion, face widespread coastal flood risk, have limited staff and technical resources, or will experience significant political pressure against any further restrictions on land use.

Need for an Alternative Route

The RPA is offered in the BiOp as one potential route for FEMA to meet its ESA Section 7 obligations within its statutory authority related to implementation of the NFIP. As such, the RPA does not outline legal requirements; FEMA may, and likely will, respond with an alternative implementation plan that they believe also meets those obligations.

Given the existing political, legal, and budget challenges, the RPA would be extremely difficult to implement exactly as written (Section II provides more detail). However, a close analysis of the BiOp, as well as several detailed conversations with NMFS staff, suggest that the agency's primary intent is for FEMA to support and require meaningful avoidance, minimization, and compensatory mitigation¹ of impacts to floodplain functions at the local level. NMFS believes FEMA should eventually make these requirements a precondition of participation in the NFIP program, and that it should provide improved mapping, guidance, technical support, and incentives to help communities comply.

Meeting this intent would be challenging, but if achieved, it would revolutionize land use planning and slow or halt the steady loss of functioning floodplains. If combined with voluntary conservation efforts and public investment in large-scale floodplain restoration, it could catalyze a significant recovery of urban and suburban floodplains, with significant benefits for fish populations and fisheries, water quality, public safety, and economic resilience.

We believe the underlying basics of the BiOp's approach, the avoidance, minimization, and compensatory mitigation of floodplain functions, could be accomplished through a combination of realistic and fairly simple local, state, and federal policy tools.

The immediate danger is that the challenges of the BiOp as written will overwhelm attempts to create a practical path toward meaningful change. The short-term interest of many of the parties and stakeholders involved are such that the focus may be more on identifying challenges than on reaching the resolution needed to improve longer-term outcomes. In the interest of furthering a productive and pragmatic conversation about how to improve floodplain management outcomes, this paper will briefly outline some of the key challenges with implementing the BiOp as written (Section II) and describe a proposed alternative policy route to achieving the intent of the document (Section III).

¹ The RPA approach suggests that NMFS expects compensatory mitigation for floodplain functions to address impacts to flood storage, stormwater infiltration, and riparian vegetation, at a minimum. It further suggests that NMFS expects compensatory mitigation to meet a "net benefit" standard within a defined "high hazard area" and a "no net loss" standard within the broader floodplain.



2 POLICY AND PRACTICAL CHALLENGES

Oregon's Department of Land Conservation and Development (DLCD) is currently identifying areas where the approach outlined in the RPA conflicts with Oregon's state and local laws, highlighting portions that would be difficult or impossible to implement given policy and practical constraints. Much of this work is being conducted through stakeholder work groups, which are still in progress, and has focused on direct conflicts with the state's land use planning system and land use laws. DLCD's analysis thus far, as well as our internal analysis of the RPA language, has highlighted the following potential challenges. Where possible, we also note potential routes to resolving these challenges through alternative policy language or mechanisms.

Urban and Rural Land Use Goals

Language in the RPA that requires net-benefit or no-net-loss compensatory mitigation for impacts to floodplain functions has raised concerns of potential conflicts with the state's planning goals related to urban (goals 2, 9, 10, 11, and 12) and rural (goals 3, 4, and 5) land uses. In particular, the RPA states a clear preference for compensatory mitigation to be cited at or very near the location of an impact and defines a set of default ratios that would be used account for uncertainty and ensure mitigation goals are met. For example, the RPA would require a 2:1 or 1.5:1 ratio for mitigation of impacts to flood storage, and a 3:1 or 2:1 ratio for replacement of riparian trees removed for development actions, depending on location of the impact site within the floodplain.

These requirements have raised concerns that providing mitigation for development impacts could adversely affect the buildable lands inventory, availability of industrial lands, and other land use requirements in urban areas, leading to a need to revise urban growth boundaries, a costly, time-consuming, and politically sensitive process. Development restrictions and mitigation requirements will tend to significantly impact the availability of employment lands, in particular, as these are disproportionately located in the floodplain due to slope and other limitations.

Similarly, to the extent that off-site mitigation is accepted, there are concerns that mitigation projects could compete with agricultural and forestry uses in rural areas. There is also concern that any limitation of development in floodplains within urban growth boundaries would lead to development being shifted to high-value agricultural and forestry lands, particularly in municipalities where availability of residential and employment lands is already limited, as described above. Finally, avoidance and mitigation measures in the RPA would apply to agriculture-related development such as building barns or other structures that can be critical to maintaining lands zoned for exclusive farm use in agricultural production. Early in the BiOp outreach process, some stakeholders were also concerned that the RPA could be interpreted as requiring avoidance and mitigation measures for agricultural and forestry practices. However, NMFS has since clarified that these land uses would not be included in the BiOp's definition of development actions.

An implementation approach that provides an effective, programmatic, and outcome-based approach to off-site compensatory mitigation can significantly ease these concerns and potential conflicts. To the extent that mitigation can be provided away from the site of a development action (but still within a biologically meaningful service area), municipalities will have more flexibility in determining where development and mitigation actions can best be placed to meet combined ecological, social, and economic goals. Willamette Partnership's pilot project with the City of Portland, for example, is developing a strategy for combining floodplain and wetland restoration with expansion of industrial lands and flood protection of residential lands, and the ability to meet removal-fill mitigation requirements at a local, rather than a tax-lot, scale, will be critical to success.



The use of technical tools to quantify the effects of development and mitigation actions on flood storage, water quality, and habitat also has potential to limit the land area needed to meet compensatory mitigation requirements. The mitigation ratios proposed by NMFS are intended to conservatively estimate the amount of mitigation needed to meet no-net-loss and net-benefit mitigation goals given the uncertainties associated with site quality, project failure, and other challenges of off-site mitigation. A more precise quantitative method would allow communities and the state to demonstrate these goals are being met without resorting to high ratios. Incorporating site quality factors into this analysis could also help steer mitigation projects to higher-quality sites, reducing the physical footprint of land needed to meet the required mitigation outcomes.

These changes to the RPA-proposed approach could be effectively implemented through the policy tools outlined in Section III and could significantly reduce the real and perceived conflicts between BiOp implementation and urban and rural land use goals. Nonetheless, some level of conflict or tension among these goals may be unavoidable; in municipalities where land availability is limited, any restrictions on development in high-hazard areas of the floodplain may increase development on other priority lands, such as high-value agriculture. The ability of local communities and the state to successfully manage this tension will likely depend on balancing and communicating the multiple benefits – including public safety and economic benefits – that can result from a smarter approach to planning and management in floodplains.

Measure 49 and Regulatory Takings

Oregon's Ballot Measure 49 (2007) allows landowners to seek compensation for some *new* (after January 1, 2007) land use regulations enacted at the state or local level that restrict certain uses or practices. If a public entity "enacts one or more land use regulations that restrict the residential use of private real property or a farming or forest practice and that reduce the fair market value of the property, then the owner of the property shall be entitled to just compensation from the public entity that enacted the land use regulation or regulations."² The reduction in fair market value is calculated using a "before and after" method whereby the fair market value of the property one year before the land use regulation is contrasted against the fair market value one year after the land use regulation and the entire delta is attributed to impact of the new regulation.³

The avoidance measures proposed in the RPA, if adopted by local communities, are likely to qualify as land use regulations that reduce property value. Language in the interim measures in the RPA that proposes significantly limiting development activities within a designated riparian buffer zone has been a particular target of Measure 49. Measure 49 contains exceptions for land use regulations that are required to comply with federal law or that restrict development activities for the protection of public health and safety.⁴ Local government and industry representatives participating in the DLCD workgroups have argued that the federal law exception does not apply because participation in the NFIP is voluntary. Community and individual compliance with section 9 of the ESA is required; however, as noted above, individual development actions at the local level may be permissible under section 9 but may collectively create cumulative impacts that result in jeopardy to the species under section 7.

In order to avoid waiver claims or litigation, we recommend local- and state-level policy actions to implement the BiOp focus to the extent possible on benefits to public safety, rather than listed fish. The BiOp as a whole makes a strong case that these goals are mutually supportive and that actions taken to

² ORS 195.305(1)

³ ORS 195.310(2).

⁴ ORS 195.305(3)



protect life and property in the floodplain will provide the needed protections to listed species. However, the RPA as written includes elements such as the riparian buffer zone and mitigation of riparian vegetation that would be difficult to incorporate through a public safety lens. These elements could still be incorporated through reference to section 9 ESA compliance. The approach we propose in Section III is intended to address NMFS's overarching goals and meet ESA requirements for both local communities and the NFIP in general, while focusing on public safety outcomes and section 9 requirements in local ordinances and state rule changes.

Availability of Mitigation Projects

Both the interim and longer-term measures of the RPA would require compensatory mitigation for impacts to floodplain function, with the result that communities would be expected to begin requiring mitigation for development actions as soon as possible, and by April 2018 at the latest. Local governments and others participating the DLCDC workgroups have expressed concern, especially given the mitigation ratios described above, that adequate mitigation crediting projects would be available within this timeframe. To the extent mitigation projects and lands are unavailable, or are very costly due to limited supply, they could trigger an Oregon statute that limits the ability of local governments to create development moratoria, either directly, or *de facto* through the application of excessively challenging or costly permit conditions.⁵

Thus, the ability of local communities to require compensatory mitigation for development actions in floodplains will depend to a significant extent on the availability of mitigation crediting projects. A few municipalities with significant expertise and capacity in compensatory mitigation may be able to meet mitigation needs on a case-by-case basis in the early stages of implementation, but many will not, or may not have a sufficient land base to provide for mitigation within the urban growth boundary as described above. Thus, in Section III we strongly recommend that the state offer a programmatic approach to siting, evaluating, providing, and tracking compensatory mitigation measures to reduce the burden on local communities and individual developers.

Regulatory Assurances for Communities

Although the BiOp results from a consultation between the two federal agencies under section 7 of the ESA (addressing actions of federal agencies), the document provides a path to regulatory assurances for individual communities for the species and actions covered, in the form of incidental take coverage. These assurances are critical to ensuring that local communities that implement early and proactive measures to improve floodplain management will also be meeting their own obligations under section 9 of the ESA (addressing species take by non-federal entities).

Incidental take coverage, outlined in Section 2.9 of the BiOp, is provided for a limited amount of development in the regulatory floodplain and quantified at the county level as a proportion of total area in the regulatory floodplain. For example, Linn County is provided to take coverage for up to 1415 acres of development, based on a total of 113,216 acres of regulatory floodplain within the county. Several local governments have expressed concerns that these thresholds are too low to accommodate likely development and that it is unclear how the multiple jurisdictions within a given county could or should split up the allowed acreage. Furthermore, take coverage is dependent on FEMA's timely progress on other parts of the RPA, which FEMA has identified as a significant challenge and which are clearly outside the realm of communities' control. In the approach described in Section III below, we propose

⁵ ORS 197.505 et seq



an alternative route to providing communities with regulatory assurances under ESA to avoid this significant level of uncertainty.

Variability in Local Capacity and Geographic Context

The RPA proposes an implementation approach that assumes a significant level of planning capacity and political ability to limit and direct development at the local level. It also assumes a level of technical support and guidance from FEMA staff that FEMA itself has described as impracticable in written communications with NMFS and the state. In reality, local governments vary greatly in their staffing capacities, technical expertise, and ability to deal with complexities related to map changes, mitigation requirements, legal challenges, and so forth. For local communities to implement the RPA as written, significant resources from the state and/or federal level would be needed to provide technical support, policy guidance, and public outreach and other means of building political support.

Furthermore, the geographic context of individual cities and counties will significantly affect their ability to reasonably address the BiOp. Some communities, especially coastal ones, have the majority of their land base in the regulatory floodplain. Others are locked in by surrounding communities or geographic constraints and have no space at all for outward growth. Still others, especially communities in far northeastern Oregon, have little residential or industrial growth and are extremely hesitant to place further regulatory constraints on what few opportunities for economic development may occur.

The BiOp addresses these sources of variability by allowing communities that face significant practical or geographic constraints to pursue an alternative route to compliance directly with NMFS. This allowance opens the door to a more regionalized and flexible approach, but individual consultation is a daunting prospect, particularly for smaller communities. The approach outlined here begins to address concerns about local capacity by proposing a stronger role for the state through rulemaking, development of a programmatic mitigation approach, and development of an alternative route to regulatory assurances through NMFS. However, additional work will likely be needed to outline paths to compliance and assurances for several key cohorts of communities. For example, tailored approaches could be developed for coastal, Willamette Basin, and eastern Oregon communities, or a tiered approach could be developed based on population size, similar to the Phase I/II community stormwater requirements.

3 PROPOSED APPROACH

We argue that the intent of the BiOp, and a path to much more effective management of floodplains, could be achieved through a combined set of policy actions at the local, state, and federal levels. Without doubt, the level of coordination and effort needed to implement this approach would be significant. However, as noted in Section I, the benefits could be significant for all stakeholder groups and would help resolve long-standing policy and legal concerns for many Oregon communities.

The approach we propose here contains three basic policy actions at the local, state, and federal scales.

Local Changes to Comprehensive Plans and Floodplains Ordinances

At the local level, changes to comprehensive plan and ordinance language would outline requirements for avoidance, minimization, and compensatory mitigation of impacts to floodplain function (i.e., application of the “mitigation hierarchy”). These changes would:

- Establish a municipality’s authority and interest to limit and require mitigation for development in floodplains and high-hazard areas;
- Outline the intent of local ordinance changes as meeting public safety and federal regulatory requirements;
- Outline specific limitations on density, subdivision, and land uses in high-hazard areas; and



- Incorporate the avoidance, minimization, and mitigation requirements defined in the state rule (below) through reference, or through development of a community-specific alternative.

State Rulemaking

At the state level, we recommend development of an administrative rule defining high-level avoidance, minimization, and mitigation standards for development actions in floodplains. A state rule can help ensure some consistency among communities in implementation, but is perhaps most useful in removing some political pressure from individual communities for increasing land use regulations. It could also establish a state-wide systematic approach to meeting compensatory mitigation requirements that would simplify transactions and minimize costs for implementing off-site mitigation. We are currently drafting a template protocol for operating such a system that would be consistent with NMFS's national and regional mitigation policy and guidance thus far.

A rule similar to that previously developed for protection of sage-grouse could be used to provide a "safe harbor" for communities, in the DLCD rather than the federal ESA sense of the term. That is, it would define an approach that could be fully implemented in local ordinances to ensure consistency with state and federal law, but it would also allow communities to propose an alternate approach that provides substantially similar outcomes. The existing sage-grouse rule defines avoidance and minimization, requires these measures in varying degrees for different management designations (comparable to the proposed high-hazard zone for floodplains), and requires compensatory mitigation consistent with the Oregon Department of Fish and Wildlife's policy and guidance.⁶

Federal Regulatory Assurances

At the federal level, any alternate path to compliance with the BiOp will need to provide regulatory assurances to local communities and the state that actions taken at those two levels meet the requirements of the federal ESA, both under Section 9 and related to FEMA's obligations under Section 7. In other words, the regulatory assurances must determine not only that state and local commitments fulfill the obligations of communities to ensure their specific land use actions comply with ESA, but also that the cumulative effect of all Oregon communities implementing these actions under the NFIP would not result in jeopardy to the species or their critical habitat.

While a formal implementation plan for the BiOp or a multi-party, multi-species ESA habitat conservation plan could conceivably provide these assurances, we recommend the parties to the consultation consider a new or amended limit under Section 4(d) of the ESA that would effectively define development actions taken under the state rule (avoidance, minimization, and mitigation requirements) to be ESA-compliant. A 4(d) Rule is commonly used to incentivize positive conservation actions and streamline the regulatory process for minor impacts. It typically defines certain activities as being consistent with a species' overall conservation, such that even if those activities result in incidental take of a species, that take is not prohibited and does not require incidental take authorization.

A new floodplains 4(d) limit could be developed through coordination and consultation among the state, NMFS, and FEMA to replace the as-yet-unused 4(d) limit for municipal, residential, commercial, and industrial development (also known as the MRCI limit) and would be comparable to existing limits for road maintenance activities and for forestry practices consistent with the state of Washington's Forest Practices Act.

⁶ OAR 660-023-0115



4 NEXT STEPS

For the path above to provide a viable approach to BiOp implementation and improving floodplain management outcomes, it will need the commitment of the State of Oregon (including both DLCD leader and the Governor’s office), FEMA staff at both the regional and national levels; and NMFS staff at least at the state and regional levels. It will also require significant outreach to build support, or at least tolerance, among individual local governments, the League of Oregon Cities and Association of Oregon Counties, interested environmental groups, and the several industry and development groups currently engaged in litigation over the BiOp. Having spent nearly three years establishing productive conversations and relationships with all of these parties, we are confident that most or all of the relevant stakeholders and responsible agencies are interested in finding a workable alternative approach to the RPA as written. However, moving to the next phase of problem-solving and path-finding will require significant effort in both convening stakeholder conversations and the shuttle diplomacy needed to begin crafting implementable draft policy documents.

Our recommended next steps for pursuing this approach are:

1. Circulate a version of this document to the key agencies: NMFS, FEMA, and DLCD to gauge support and viability;
2. Develop rough drafts of a model state rule and 4(d) language, to further clarify how the policy actions at the local, state, and federal levels fit together and how they might work within existing policy and legal constraints;
3. Continue to gauge and build support, while refining policy drafts at all three levels with feedback from local government staff, environmental and industry interests, agencies, and land use and legal experts; and
4. Explore the potential for a regionalized or tiered approach to better accommodate variability in local government capacity and geographic context, as described in Section II.