SKAGIT COUNTY Ordinance # O20220007 Page 1 of 24

An Interim Ordinance Declaring an Emergency and Adopting a Moratorium on the Acceptance of Permit Applications for Certain Offsite Compensatory Mitigation Projects On Skagit County Agricultural-Natural Resource Lands

WHEREAS pursuant to the Growth Management Act, Chapter 36.70A RCW ("GMA"), the Skagit County Board of Commissioners has adopted the Skagit County Comprehensive Plan and Title 14, the Unified Development Code, for all unincorporated areas of Skagit County; and

WHEREAS RCW 36.70A.390 and RCW 36.70.795 authorize the Board of County Commissioners to adopt moratoria, interim zoning ordinances, and interim official controls to preserve the *status quo* while new plans and regulations are being developed; and

WHEREAS RCW 36.70A.390 and RCW 36.70.795 permit the County to adopt such measures without notice and public hearing when deemed appropriate to promote the public health, safety and welfare, provided that the County holds a public hearing within sixty (60) days after the adoption of this interim ordinance; and

WHEREAS Skagit County has declared that natural resource lands, including agricultural lands, are a cornerstone of the County's economy, culture, community, and history, and as such, their protection and enhancement is of paramount importance to Skagit County and its citizens; and

WHEREAS Skagit County has declared that commercial, residential and industrial uses unrelated to agriculture are to be discouraged on designated Agricultural Natural Resource Lands (Ag-NRL); and

WHEREAS the protection of Skagit County's agricultural land base has required generations of sacrifice, by which Skagit landowners have intentionally forgone the business opportunity and wealth that intensive urban development of farmland has produced in other Puget Sound counties; and

WHEREAS Skagit Valley farmland and the open space our community has successfully protected is a regional treasure used and enjoyed by many tens of thousands of visitors each year as well as birds and other wildlife; and

WHEREAS uniquely suited for seed production due to its maritime proximity, the Skagit Valley produces a substantial portion of the world's brassica, spinach and other crop seed; and

WHEREAS with escalating food prices and global instability in food markets, protecting the Skagit for seed production and other agriculture is squarely in the public interest; and

WHEREAS a critical mass of farmland acreage is necessary to sustain crop rotation as well as agricultural processing, transport, storage and support services and infrastructure, and the tipping points beyond which these functions and services will be lost due to declining farmland acreage is impossible to calculate with meaningful precision; and

WHEREAS only some 88,000 acres of prime Skagit farmland remain, and continued conversion of prime farmland to other uses is likely to have far-reaching effects on the stability and viability of Skagit County's agricultural economy; and

WHEREAS Skagit County has adopted a broad range of GMA Comprehensive Plan policies and development regulations intended to ensure long-term conservation of agricultural lands; and

WHEREAS it is in Skagit County's interest to ensure that large habitat enhancement projects on Ag-NRL lands are professionally and competently executed, with consent from and cooperation with responsible diking and drainage districts. To that end, Skagit County Code ("SCC") 14.16.400(4)(d) requires that any habitat enhancement project on farmland involving "the alternation of the landscape by excavation or sculpting of soil and/or the alteration of hydrology" first obtain a Hearing Examiner Special Use Permit, see also SCC 14.04.020 (definition of "habitat enhancement project"); and

WHEREAS there is no requirement to seek a Hearing Examiner Special Use Permit for habitat enhancement projects on Ag-NRL lands to the extent the proposed project does not involve terraforming, hydrology modification and/or channel redirection; and

WHEREAS a Hearing Examiner Special Use Permit is *not* required for habitat enhancement projects done as *onsite* mitigation, see SCC 14.04.020, definition of "habitat enhancement project"; and

WHEREAS Skagit County prohibited wetland mitigation banking on lands zoned Ag-NRL by interim Ordinance No. 20090001 on February 9, 2009, followed by permanent Ordinance No. 2009006 adopted on June 8, 2009, categorically excluding wetland mitigation banking from major habitat enhancement activities that may be permitted as a Hearing Examiner Special Use on designated Ag-NRL lands;

WHEREAS the central reason for the Board's adoption of Ordinance Nos. 20090001 and 20090006 was to prohibit large-scale compensatory mitigation on Skagit County farmland arising from the environmental impacts of offsite commercial, residential and industrial activities unrelated to farming; and

WHEREAS consistent with the foregoing, the Board generally opposes offsite compensatory mitigation on designated Ag-NRL lands; and

WHEREAS Skagit County's Comprehensive Plan envisions sustaining a robust fisheries resource in the Skagit, in part to help satisfy our collective national obligation to ensure a harvestable anadromous fishery in the Skagit River under the 1855 Treaty of Point Elliott; and

WHEREAS Skagit County acknowledges that long-standing and broadly-supported plans and agreements envision major habitat enhancement projects in the diked and drained portion of the Lower Skagit Valley to achieve agreed-upon recovery goals set forth by the 2005 Skagit Chinook Recovery Plan; and

WHEREAS habitat enhancement in the diked and drained portion of the Lower Skagit Valley inherently involves major modification to critical flood protection and drainage infrastructure owned and maintained by Skagit diking and drainage districts; and

WHEREAS the Board finds it imperative that habitat enhancement projects on Ag-NRL lands be sited, planned, executed and maintained with the utmost forethought and care, with the direct and continuous involvement of diking and drainage districts an indispensable necessity; and

WHEREAS the GMA and the Skagit County Comprehensive Plan require that the needs of farming and the fisheries resource be carefully and thoughtfully balanced, and to that end the Board finds it imperative that any conversion of prime Skagit agricultural land be highly likely to deliver an increase in harvestable anadromous species while minimizing impacts to agriculture and farmland; and

WHEREAS the Board finds that major habitat enhancement projects that have implications for existing diking and drainage (as defined by SCC 14.04.020) should generally be done at scale rather than piecemeal, with careful planning, thereby allowing effective project and long-term management as well as meaningful monitoring of results; and

WHEREAS Skagit County participated in good faith with federal and state resource agencies, Skagit tribal representatives, and other local governments in a comprehensive analysis to determine the highest and best locations for significant estuary habitat enhancement in the Lower Skagit Valley, which produced the Estuary Restoration Strategic Assessment ("ERSA"), a document identifying a prioritized list of significant Skagit Delta habitat enhancement projects from the standpoint of fisheries resource benefit and other key criteria, a copy of which is attached hereto as Exhibit A; and

WHEREAS Skagit County fully supports the prioritized completion of major habitat enhancement projects in furtherance of 2005 Chinook Recovery Plan goals to the extent professionally executed and competently managed, which indispensably necessitates the involvement and consent of the relevant diking and drainage districts responsible for the geographic area and critical public infrastructure involved in such projects; and

WHEREAS it is in the interest of Skagit County and our community as a whole that 2005 Chinook Recovery Plan goals be completed on a timely basis, notwithstanding valid concerns that habitat enhancement to date has failed to deliver increases in harvestable numbers of Skagit Chinook promised by the 2005 Skagit Chinook Recovery Plan, in part due to extremely high marine intercept of Skagit Chinook; and

WHEREAS the Board finds that major delta habitat enhancement projects necessary to achieve agreed-upon recovery goals under the 2005 Chinook Recovery Plan are substantially on schedule; and

WHEREAS the Board finds that prioritized public land enhancement projects, to be completed prior to projects on private land, have yet to be started and/or completed; and

WHEREAS Seattle City Light, an energy production entity based in Seattle, has recently expressed intent to engage in offsite compensatory mitigation for its hydroelectric dams, which are not located in Skagit County; and

WHEREAS Seattle City Light's offsite compensatory mitigation plans specifically involve the acquisition and conversion of a significant amount of designated Ag-NRL land within Skagit County, which will inherently necessitate modification to Skagit diking and drainage infrastructure; and

WHEREAS for energy production and other offsite industries, the conversion of Skagit County farmland may well be a more financially attractive alternative than onsite mitigation, thereby creating inappropriate economic incentives that, if left unaddressed, will undermine Skagit County's long-stated intention to preserve and protect Skagit County's agricultural land base; and

WHEREAS in part due to rapid growth in the compensatory mitigation industry, Skagit County has reasonable fear that more such economic interests unrelated to agriculture will increasingly target Skagit Valley farmland for offsite compensatory mitigation activities, further degrading and endangering Skagit County's agricultural land base and economy; and

WHEREAS Skagit County has grave concerns regarding the integrity of offsite compensatory mitigation conducted on Skagit County Ag-NRL lands to date, see, Sauk-Suiattle Indian Tribe v. City of Seattle, Washington State Court of Appeals Division 1, Case No. No. 83632-3, and in particular Skagit County's amicus curiae brief filed therein; and

WHEREAS Skagit County has reasonable fear that unrestricted access to Skagit County's agricultural land base for offsite compensatory mitigation purposes will undermine, interfere with, and jeopardize existing plans and agreements intended to meet established species recovery goals in a rational and orderly manner; and

WHEREAS the Board of County Commissioners finds that an emergency exists within the County, and the immediate adoption of an interim ordinance effecting a moratorium on applications for special use permits for offsite compensatory mitigation on lands designated AgNRL is necessary for the immediate preservation of the public peace, health, and safety and for the support of Skagit County government and its existing institutions; and

WHEREAS this action is taken consistent with the State Environmental Policy Act (SEPA) provisions at WAC 197-11-880 regarding emergency actions.

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NOW, THEREFORE, BE IT ORDAINED:

The Board of County Commissioners adopts the foregoing findings of fact, finding further as follows:

- 1. The United States Supreme Court in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302 (2002), held that moratoria are essential tools for successful development regulation and re-affirmed that moratoria are not per se takings.
- 2. The regulations currently in effect do not adequately ensure the protection of Ag-NRL lands as agricultural lands of long-term commercial significance in Skagit County.
- 3. Skagit County intends to develop permanent regulations to address the deficiencies in the current regulations.
- 4. This interim ordinance is exempt from the public participation requirements of the GMA, subject to the requirements of RCW 36.70A.390.
- 5. An emergency exists and the immediate adoption of a moratorium imposed by this ordinance is necessary for the protection of the public health, safety, property, and peace.

[remainder of page left intentionally blank]

NOW THEREFORE, BE IT FURTHER ORDAINED:

Section 1. The Board of County Commissioners hereby declares a moratorium providing that no special use permit applications for projects involving offsite compensatory mitigation shall be accepted pursuant to Skagit County Code 14.16.400(4)(d).

Section 2. Skagit County Code 14.16.400(4)(d) is hereby provisionally amended to read as follows, with added text in bold:

Habitat enhancement and/or restoration projects, except mitigation banks and other projects involving offsite compensatory mitigation, as defined by SCC 14.04.020.

Section 3. For the purposes of this ordinance, "Offsite Compensatory Mitigation" is defined as any action proposed on Ag-NRL zoned lands as compensatory mitigation for activities, actions or environmental impacts occurring outside Skagit County Ag-NRL zoned lands. Skagit County Code 14.04.020 (Definitions) is hereby provisionally amended to add the foregoing definition.

Section 4. This ordinance shall take effect immediately upon passage by the Board of County Commissioners.

Section 5. The moratorium created by this ordinance shall be effective for six (6) months.

Section 6. The ordinance and moratorium may be renewed for one or more six (6) month periods if a subsequent public hearing(s) is held and findings of fact are made prior to each renewal.

Section 7. This ordinance and moratorium shall not apply to any applications vested before the effective date of this ordinance. An application shall be vested pursuant to Skagit County Code 14.02.050 when the application is deemed complete pursuant to Skagit County Code 14.06.090.

Section 8. If any section, sentence, clause, or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause, or phrase of this ordinance.

[remainder of page left intentionally blank]

Section 8. The Board of County Commissioners shall hold a public hearing on September 6, 2022 at 9:30 a.m. - 10:30 a.m. in the Commissioners Hearing Room, 1800 Continental Place, Mount Vernon, Washington, for the purpose of hearing public testimony on this matter in accordance with RCW 36.70A.390.

WITNESS OUR HANDS AND THE OFFICIAL SEAL OF OUR OFFICE this 18th day of July 2022.

BOARD OF COUNTY COMMISSIONERS SKAGIT COUNTY, WASHINGTON



Peter Browning, Chair

Ron Wesen, Commissioner

Lisa Janicki, Commissioner

ATTEST:

Clerk of the Board

APPROVEDA'S TO FORM:

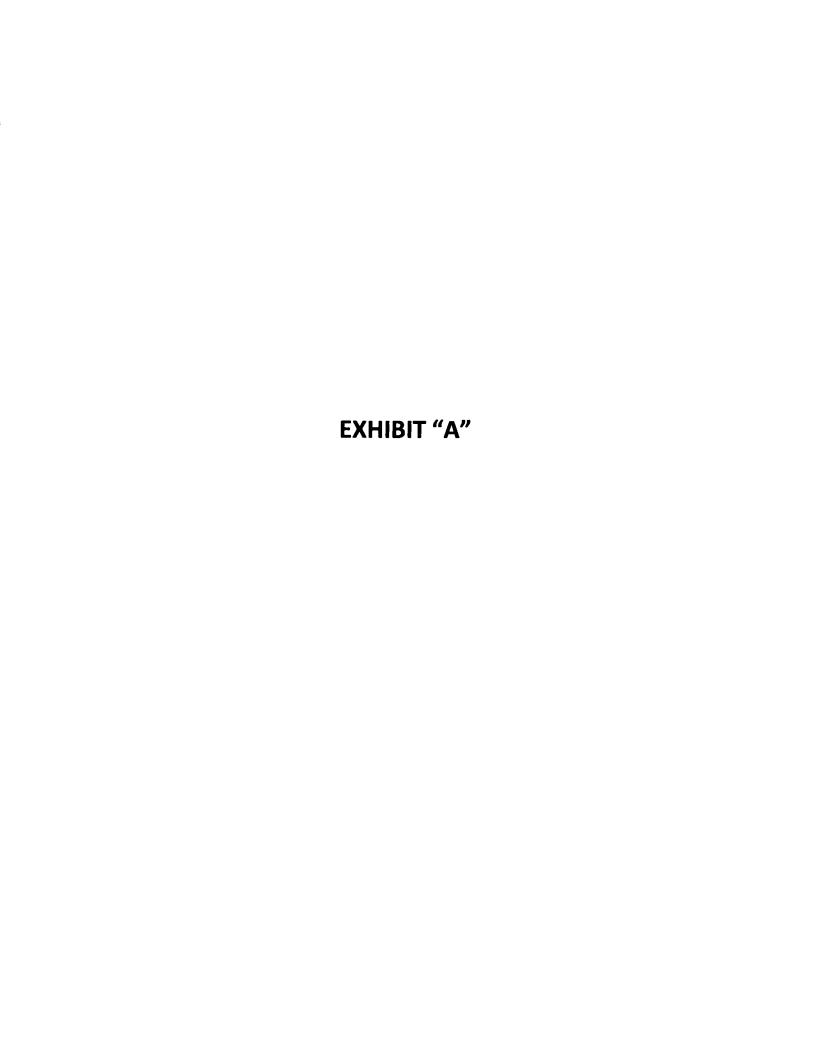
Will Honea, Senior Deputy

Skagit County Prosecuting Attorney

APPROVED AS TO CONTENT:

Hal Hart, Director

Planning & Development Services





Estuary Restoration Strategic Assessment

A Summary Report of the Skagit Hydrodynamic Modeling Project





INTRODUCTION



IN THE SKAGIT RIVER, the futures of salmon and people are intertwined. The Estuary Restoration Strategic Assessment sets a course to balance the needs of fish, farmers, and flood risk reduction.

Chinook salmon are a cornerstone of the Skagit River's tribal culture, economy, and ecosystem. As with many watersheds in Puget Sound, a majority of the Skagit's tidal wetlands were diked and drained over a hundred years ago to make way for farms and towns. Young salmon, or smolts, find food and shelter in estuarine waters as they prepare to go to sea; loss of estuary habitat is one of several factors that contributed to the decline of this important species.

To recover Chinook, the Skagit delta needs to provide habitat for 1.35 million more smolts annually, which is predicted to require 2,700 acres of estuary restoration and improving access to existing habitats.1

Local communities and businesses also rely on the delta. Farmers grow crops in the rich soils, producing valuable food, flower bulbs, and seeds, and driving the local economy. Thousands of people live, work, and recreate on the delta, with the number rising every year. Aging flood and drainage infrastructure combined with a changing climate are increasing flood risk.

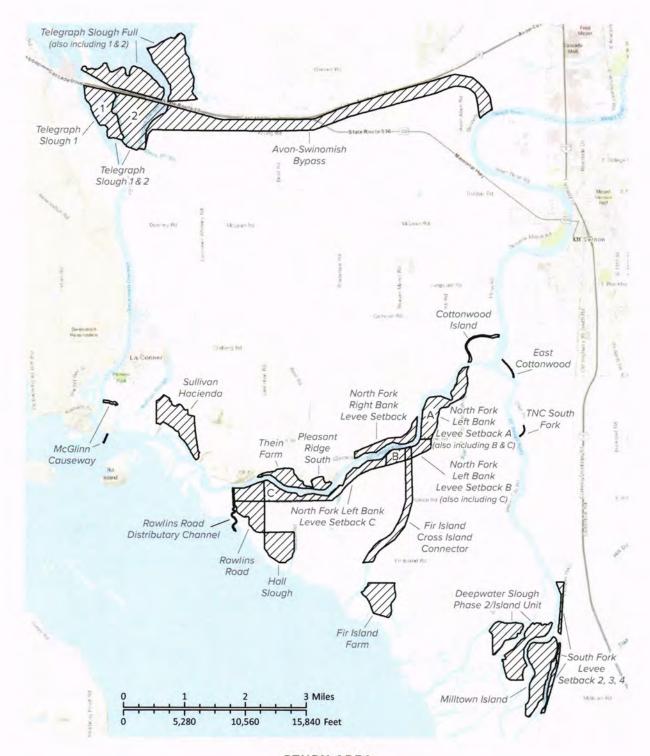
The Skagit Farms, Fish and Flood Initiative (3FI) is addressing these challenges by creating and implementing mutually beneficial solutions. The goal is to ensure long-term viability of agriculture and

salmon while reducing the risk of destructive floods. 3FI also aims to support implementation of the Skagit Tidegate Fish Initiative, an agreement that links the maintenance of critical drainage infrastructure to estuary restoration to ensure that both needs are being achieved.

Under the umbrella of 3FI, representatives from salmon recovery, flood risk reduction, and agricultural groups collaborated to develop the Estuary Restoration Strategic Assessment (ERSA). Using scientific modeling and analysis, they evaluated the potential benefits and impacts of more than twenty project concepts for estuary restoration. In a collaborative decision-making process placing equal weight on farms, fish, and flooding, they used data to develop recommendations for restoration actions that will increase estuarine habitat for salmon while providing benefits and minimizing negative impacts for farms and flood risk reduction.

The ERSA combines best available science. local knowledge, and community values to achieve shared goals. The following pages summarize the process used to develop the ERSA and present the recommendations, lessons learned, and next steps for implementation.

^{1.} Skagit Chinook Recovery Plan (2005)



STUDY AREA

The Estuary Restoration Strategic Assessment focused on tidally influenced portions of the Skagit River watershed, including Skagit Bay, the Swinomish Channel, and southern Padilla Bay. Drawing on previous studies and incorporating new ideas, the project team worked to identify all project concepts, regardless of type or size, for inclusion in the analysis. The resulting list included twenty-three individual project concepts and three combined project concepts. The project team shared the list with community members and subject matter experts for review to ensure accuracy and completeness. This map shows the locations of all project concepts that were analyzed. Three types of projects were included: (1) dike setbacks or removals to restore inundation with dike construction to protect adjacent lands, (2) hydraulic projects to change flow patterns by excavating new channels, and (3) alteration of existing channels waterward of dikes to increase backwater flow.

APPROACH



A project team with **DIVERSE** participants created a **SCIENTIFICALLY** sound decision-making process based on community VALUES.

COLLABORATION AND TRANSPARENCY

The ERSA project team was led by scientists from the National Oceanic and Atmospheric Administration (NOAA) Restoration Center, The Nature Conservancy. and Washington Department of Fish and Wildlife. The co-leads invited a wide array of organizations from salmon recovery, flood risk reduction, and agricultural interests to join. Representatives from fourteen organizations actively participated as members of the project team. The diversity of perspectives represented on the project team was critical to ensure that the final results were meaningful and well supported. The project team strived for a collaborative, thoughtful, and transparent process that used best available science. The project team engaged with people in the broader community to gain additional input and perspectives.

ESTABLISHING CLEAR OBJECTIVES

The project team set out to understand the benefits and impacts that could result from each of the project concepts. The goal was to use this information to develop a strategic approach for prioritizing project concepts for implementation.

Quantitative analysis was an important part of the process. It enabled participants to understand how their priorities were incorporated in decision-making

toward, and ultimately the final recommendations. Groups of representatives from each of the three interests—farm, fish, and flood—chose the objectives for their interest. The objectives encompassed both benefits to be maximized and impacts to be minimized from estuarine restoration. For each of their objectives, the interest groups developed quantitative indicators that could be used to analyze

PROJECT TEAM

The ERSA project team included individuals from:

- · NOAA Restoration Center
- · Seattle City Light
- · Skagit Conservation District
- · Skagit County Consolidated Diking Improvement District #22
- · Skagit County Dike District #3
- Skagit County Dike District #17/Dike District Partnership
- · Skagit Watershed Council
- · Skagitonians to Preserve Farmland
- · The Nature Conservancy
- · Washington Department of Fish and Wildlife
- · Western Washington Agricultural Association
- · Upper Skagit Tribe
- · United States Geological Survey

how much each restoration project concept would contribute toward the objectives.

Each interest group had one hundred points to allocate among their objectives, allowing weighting of high-priority objectives. By allocating a hundred points for each of the three interests, the analysis placed equal weight on fish, farms, and flood risk reduction, when calculating multi-interest scores.

The interest groups shared with the entire project team their reasons for choosing objectives and indicators, and for weighting or not weighting objectives. This discussion allowed everyone to better understand the perspectives of the other groups, building trust and a common knowledge base.



Levees and dikes protect Skagit farmland from flooding.

OBJECTIVES AND SCORING SYSTEM FOR RESTORATION PROJECT CONCEPTS

Total Possible Total Possible Farm Interest Objectives **Interest-Specific Scores Multi-Interest Scores** BENEFITS (60 PTS) · Maximize fish/acre farmland (20 pts) · Support regulatory agreements (20 pts) · Prioritize public lands (20 pts) IMPACTS (40 PTS) Minimize farmland loss (20 pts) · Avoid preserved farmland (20 pts) FARM: 100 PTS BENEFITS: 220 PTS Fish Interest Objectives BENEFITS (85 PTS) · Increase number of smolts (25 pts) · Restore tidal and riverine processes (15 pts) 300 · Increase suitable channel habitat (15 pts) PTS · Increase connectivity (15 pts) · Restore diverse habitat types (15 pts) IMPACTS (15 PTS) FISH: 100 PTS · Minimize loss of existing habitat (15 pts) IMPACTS: 80 PTS **Flood Interest Objectives** BENEFITS (75 PTS) · Reduce flood water elevations (25 pts) · Reduce risk of levee failure (25 pts) · Improve drainage (25 pts) IMPACTS (25 PTS) · Minimize new levee systems where none FLOOD: 100 PTS existed (25 pts)

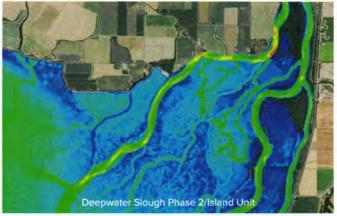
ANALYZING POTENTIAL OUTCOMES WITH BEST AVAILABLE SCIENCE

Scientists and technical experts worked with the project team to quantify the indicators for each project concept using best available science, including updated models and analytical methods.

Since release of the Skagit Chinook Recovery Plan in 2005, improvements have been made in models used to predict tidal channel formation on restored sites, which in turn affects the predicted number of smolts a site can hold. Incorporating the improved models was critical, as the updated predictions significantly increased smolt numbers for two sites and lowered those for two others.

New geographic information system (GIS) analyses, models of sedimentation patterns, knowledge of local tidal and river flood and drainage patterns, and vegetation community predictions also informed calculations of indicators.

This work was an iterative process between experts and the project team. Input from members of each interest group helped ensure that the models reflected real-world conditions. Through this process, the team refined indicators to better convey the effects of restoration and to ensure that they provided meaningful information to each interest group.





Technical experts used a hydrodynamic model to predict water depths, as part of the indicators analysis for each project concept.

THE ANALYSIS PROCESS

- 1. Identify estuary restoration project concepts based on previous studies
- 2. Define objectives and indicators for fish, farm, and flood interests
- 3. Determine technical analyses needed to measure indicators
- 4. Complete technical analyses for each project concept
- 5. Calculate indicators from technical outputs
- 6. Assess: Are the indicator results meaningful? Do they provide the information
- needed for decision making?

- 7. Refine framework for assessing benefits and impacts
- 8. Calculate interest-specific scores for each project concept
- 9. Calculate multi-interest scores for each project concept
- 10. Group the project concepts based on their multi-interest scores
- 11. Develop management recommendations for each group of project concepts

MULTI-INTEREST SCORES FOR EACH PROJECT CONCEPT

The indicator measurements were used to produce a multi-interest score for each project concept. The purpose of the multi-interest score is to indicate the total anticipated benefits and impacts for the three interest areas—fish, farms, and flood risk reduction—collectively, rather than separately.

First, the values calculated for each indicator across all project concepts were standardized on a scale from zero to one, so that results from different types of indicators could be summed into a total score. To reflect the weight assigned by the interest groups to each objective, the standardized value for an indicator was multiplied by the number of points allocated to its corresponding objective. For example,



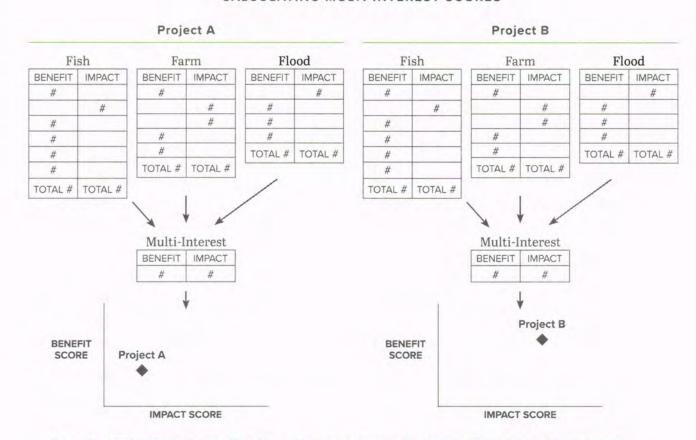
A levee protects adjacent farmland from flooding.

a project that received a 1.0 score for the objective to "Maximize fish/acre farmland" would receive all of the possible 20 points, and a project with a 0.5 score would receive 10 points.

The benefit and impact scores within each interest were summed, and then the multi-interest score was calculated by summing the interest-specific scores.

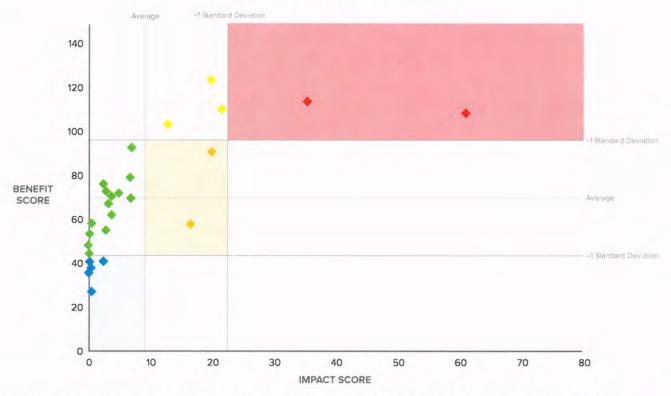
The process of calculating multi-interest scores is illustrated in the figure below.

CALCULATING MULTI-INTEREST SCORES



For each project concept, the benefit and impact indicator scores for fish, farm, and flood interests were summed to generate single-interest total scores, and then multi-interest scores. The multi-interest scores were graphed for comparison to other project concepts, as shown in this conceptual diagram for two hypothetical projects.

MULTI-INTEREST SCORES FOR ALL PROJECT CONCEPTS



This graph shows the multi-interest scores for all project concepts in the ERSA analysis. Each diamond represents a project concept. The colors indicate groups of project concepts for management purposes, based on their levels of benefits and impacts (low, medium, or high). The ERSA project team recommends the green management group (low impacts, medium benefits) as the priority for implementation.

VISUALIZING TRADEOFFS

To visualize how the project concepts compared in their benefits and impacts, the project team plotted the multi-interest benefit score for each project concept against its multi-interest impact score, as shown above.

DEFINING MANAGEMENT GROUPS

Based on the averages and standard deviations of the benefit and impact scores, the project team categorized the multi-interest scores as high, medium, or low. This placed the project concepts into five distinct groups for planning and management purposes.

CUMULATIVE IMPACTS AND CLIMATE CHANGE

All restoration project concepts except the two projects in the red management group were modeled to identify potential cumulative impacts and begin preliminary analysis of climate change impacts. Cumulative effects analyses revealed no major impacts on the flow distribution between the North and South Forks of the Skagit River or on the performance of individual project concepts.

These findings provide a starting point for evaluating how the benefits of project concepts may change over time. Additional analysis of climate change, including modeling a wider array of sea level rise and river flow scenarios, needs to be completed to better understand potential changes to these projects and address future needs for drainage and diking infrastructure.

RECOMMENDATIONS



To support successful outcomes, the project team recommends a **CLEAR FRAMEWORK** for implementation and a **TIMELINE** for each management group.

PROJECT IMPLEMENTATION PATHWAY

Advancing estuary restoration from concepts to completed projects with monitored outcomes requires a clear framework. To support specific recommendations for each management group, the project team identified a typical pathway for project implementation. The pathway has well-defined phases and applies to projects on both public and private lands. Monitoring project outcomes provides valuable information about progress toward recovery goals for decisions about future project implementation.



Recommendations

AN IMPLEMENTATION STRATEGY FOR EACH MANAGEMENT GROUP

Using the implementation pathway as a framework, the project team developed a specific implementation strategy for each management group. The strategies were tailored based on the management group's levels of benefits and impacts (high, medium, low). Not all steps in the management pathway are included in the implementation strategies for some groups, and within each group not all projects are expected to advance at the same pace. Additionally, some project concepts may never advance because of project-specific factors.

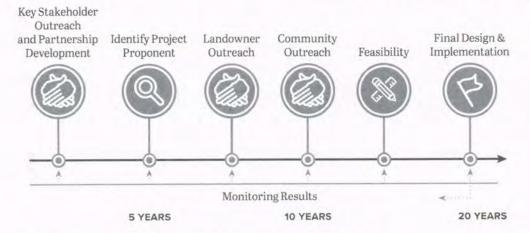
GREEN MANAGEMENT GROUP: HIGHEST PRIORITY

The project team recommends the green group of project concepts as the highest priority for collaborative implementation by fish, farm, and flood groups. These projects are anticipated to have moderate levels of benefits across interests and relatively low impacts. Therefore, they have the greatest potential to advance the goals of each interest while minimizing negative impacts.

With thirteen individual or combined project concepts, this is also the largest group. Some of the projects are already in the implementation pathway due to landowner willingness. As of 2019. Fir Island Farm had been completed, additional restoration actions at Milltown Island were in the feasibility and design phase, and Deepwater Slough Phase 2/Island Unit was in the stakeholder outreach phase.

Project	Acres
Fir Island Farm*	140
Milltown Island**	222
Deepwater Slough Phase 2/Island Unit**	268
McGlinn Causeway	7
North Fork Left Bank Levee Setback C	275
North Fork Right Bank Levee Setback	86
Rawlins Road	191
South Fork Levee Setback 2, 3, 4	56
Sullivan Hacienda	205
Telegraph Slough 1	185
Telegraph Slough 1 & 2	495
McGlinn Causeway & Telegraph Slough 1	192
McGlinn Causeway & Telegraph Slough 1 & 2	501

^{*} Completed (actual acres restored: 131) ** In progress (2019)



Recommended timeline for projects in the Green Management Group.



The Fir Island Farm restoration project in the Green Management Group has been completed with 131 acres of estuary habitat restored.

YELLOW & ORANGE MANAGEMENT GROUPS

Five individual or combination project concepts had either high benefits/moderate impacts or moderate benefits/moderate impacts. Because of the higher likelihood of impacts from these projects, the project team recommends that outreach to key stakeholders and the development of multi-interest partnerships not begin immediately to allow time for less impactful actions from the green group to be implemented.

BLUE MANAGEMENT GROUP

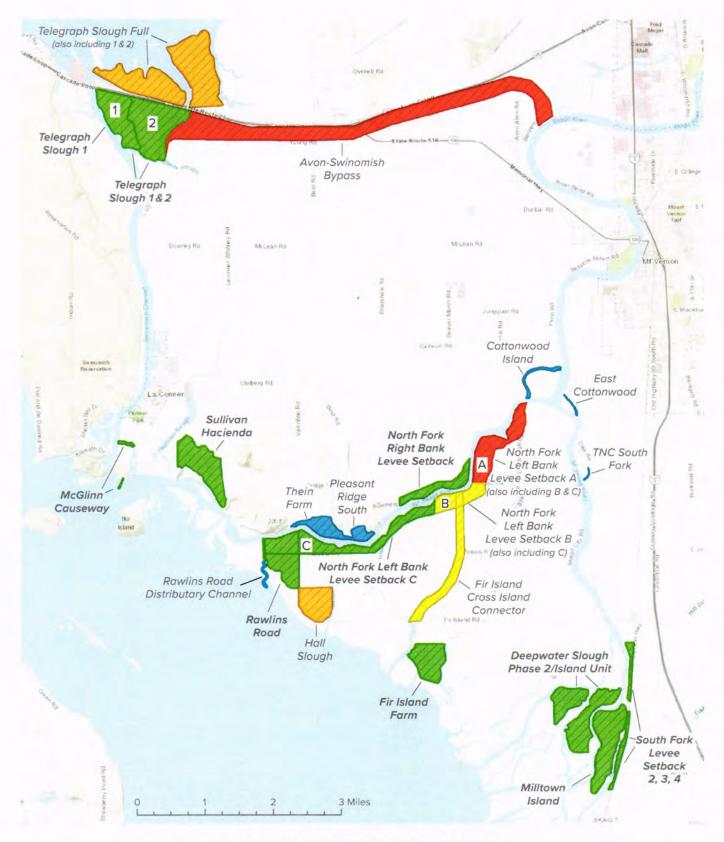
The blue group includes six project concepts with low multi-interest benefits or strong benefits for only one interest group and therefore are not recommended to be a focus of multi-interest work. Because they are anticipated to have low impacts, however, they may be advanced by one interest group should the benefits be valuable enough.

Fir Island Cross Island Connector	150
North Fork Left Bank Levee Setback B	370
McGlinn Causeway & Telegraph Slough Full	1,055
Project	Acres
Hall Slough	134
Telegraph Slough Full	1,055

Project	Acres
Cottonwood Island	15
East Cottonwood	2
Pleasant Ridge South	30
Rawlins Road Distributary Channel	8
Thein Farm	78

RED MANAGEMENT GROUP

The two project concepts in the red group—Avon-Swinomish Bypass and North Fork Left Bank Levee Setback A—are anticipated to have the highest total impacts as well as the highest impacts to any single interest. The project team recommends not advancing these projects toward implementation due to the high levels of impacts. These project concepts were excluded from cumulative impacts analyses.



PRIORITIES FOR IMPLEMENTATION

The project team recommends the green group of project concepts as the highest priority for collaborative implementation. The yellow and orange groups should not move ahead immediately due to the likelihood of higher impacts. Blue project concepts may be advanced as single-interest actions. The red group should not be advanced at this time.

MOVING FORWARD



STRONG COLLABORATION of fish, farm, and flood interest groups and **MONITORING** of project outcomes are essential for successful estuary restoration.

THROUGH PARTNERSHIPS, ADVANCE THE PROJECTS IN THE GREEN MANAGEMENT GROUP

The project team recommends that the focus over the next five years should be on engaging key stakeholder groups and developing multi-interest partnerships to advance project concepts in the green group. Project footprints may be modified to address concerns related to climate change, agricultural drainage, coastal resiliency, and offsite impacts that were too detailed and complex to include in the ERSA analysis.

The Skagit County Drainage and Irrigation
Districts are a key stakeholder group for this effort.
The twelve districts are signatory to the Skagit
Tidegate and Fish Initiative (TFI), a framework that
balances estuary restoration for Chinook salmon
recovery and the need to maintain critical drainage
infrastructure. The districts agreed to work with
the restoration community to make the landowner
contacts necessary to secure permissions, easements,
or ownerships to implement restoration projects
and to work with landowners to understand habitat
restoration goals.







Additionally, the commissioners of the Skagit Dike, Drainage and Irrigation Districts are themselves key landowners as they own and maintain the infrastructure that will need to be removed or realigned during restoration. By providing crucial knowledge of the complex diking and drainage systems that need to be considered in the design of restoration projects, the commissioners can help ensure that multiple benefits are achieved. Restoration practitioners will work together with the Districts to engage private landowners and advance projects from concept to design and implementation.

The project team anticipates these collaborative efforts may focus on a few, well-supported projects at any one time; therefore, individual project timelines will be staggered. The timeline for implementing projects will also be influenced by monitoring programs that measure progress toward Chinook recovery goals and allow for adaptive management in the Skagit delta.

SUPPORT PROJECTS ALREADY IN THE IMPLEMENTATION PATHWAY

As of 2019, two projects in the green group were being advanced: Deepwater Phase 2/Island Unit (outreach and partnership development) and additional restoration actions at Milltown Island (feasibility and design). Outreach to district commissioners and the

local community, including agricultural and salmon recovery entities, is being incorporated in these two projects. Continued support through partnerships and funding to advance these two projects through the implementation pathway is a priority.

MONITOR COMPLETED PROJECTS AND SUPPORT ADAPTIVE MANAGEMENT

Monitoring the outcomes of completed restoration projects and sharing results broadly is a critical need voiced by all interest groups. Understanding how completed projects are achieving, or not achieving, the goals of each interest will help improve the design and approaches used for future projects. Monitoring information from past projects informs all steps in the implementation pathway.

Project monitoring is also crucial for adaptive management to ensure that the anticipated benefits are achieved and unforeseen impacts are addressed. Monitoring to support adaptive management should address multi-interest goals. At the Milltown Island project, monitoring has shown that the site has not achieved the desired channel network connectivity and density, and therefore needs additional actions to achieve its full potential for supporting Chinook smolts. Wiley Slough has had ongoing infrastructure problems related to the tidegates and dikes that need to be corrected to meet its infrastructure goals.

CONCLUSION



ERSA provides a strategic approach for achieving SALMON RECOVERY, FLOOD RISK REDUCTION, and AGRICULTURAL VIABILITY.

The Skagit Chinook Recovery Plan notes that long-term estuary restoration projects "are socially complex and resource intensive so will need to include elements of mutually understood benefits for most, if not all, interest groups involved." Focusing on restoration project concepts with moderate benefits and low impacts (Green Management Group), building off existing multi-party agreements, and continuing collaborations across the three interests creates a pathway for success on the Skagit delta.

LESSONS LEARNED FOR DEVELOPING WELL-SUPPORTED ACTIONS

The goal of the ERSA project was to develop "well-supported actions to achieve long-term viability of Chinook salmon and community flood risk reduction in a manner that protects and enhances agriculture and drainage". To achieve this goal, the

ERSA project team used a process and analyses that were themselves well supported by participants representing the three interests.

Several components of the process were integral for buy-in across interests and the development of critical partnerships for this and future actions.

- All interests were allocated equal portions of the multi-interest score.
- Representatives of interest groups developed the objectives and indicators for their interest and decided whether weighting of objectives was needed.
- Interest groups shared why they had selected objectives and indicators, leading to common understanding across interests.
- All parties had time to review, understand, and comment on the modeling and scientific analyses.
- · Throughout the process, participants adjusted







Conclusion

objectives and indicators to ensure that they were meaningful and informative.

- Benefits and impacts were clearly identified, and impacts were acknowledged.
- Concerns of the project team members were identified and addressed; additional concerns were documented so they can be addressed at later stages.

By creating a process that engaged all interests, incorporated their views, and weighted their needs equally, the ERSA project built strong support for its recommendations and for continued collaboration.

The relationships that were developed are critical to the next phase of work, as the groups advance projects through the implementation pathway to maximize benefits and minimize or offset impacts.



PROJECT TEAM

Development of the Estuary Restoration Strategic Assessment required multiple years of intensive effort and would not have been possible without the dedication of project team members.

The project team included individuals from:

- · NOAA Restoration Center
- The Nature Conservancy
- · Washington Department of Fish and Wildlife
- · Seattle City Light, Skagit Conservation District
- Skagit County Consolidated Diking Improvement District #22
- · Skagit County Dike District #3
- Skagit County Dike District #17/Dike District Partnership
- · Skagit Watershed Council
- Skagitonians to Preserve Farmland
- · Western Washington Agricultural Association
- · Upper Skagit Tribe
- · U.S. Geological Survey

SKAGIT FARMS, FISH AND FLOOD INITIATIVE

NOAA Restoration Center
Skagit County Dike District #17/Dike District Partnership
Skagitonians to Preserve Farmland
Washington Department of Agriculture
Washington Department of Fish and Wildlife
Western Washington Agricultural Association

SCIENTIFIC AND TECHNICAL EXPERTS

Pacific Northwest National Labs (hydrodynamic modeling)
U.S. Geological Survey (sediment study)
Skagit River System Cooperative (tidal channel and smolt estimates)
The Nature Conservancy (GIS analyses)

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