A. BACKGROUND

1. Name of proposed project, if applicable:
   The Skagit Delta Tidegates and Fish Initiative Implementation Agreement (Agreement) tidegate and floodgate maintenance.

2. Name of applicant:
   Western Washington Agricultural Association (WWAA) as the representative for: Drainage and Irrigation Districts 5, 14, 15, 16, 17, 18, 19, 22, 25; Consolidated Diking District 22; Diking, Drainage and Irrigation District 12, and Diking District 3.

3. Address and phone number of applicant and contact person:
   Contact: Mr. Mike Rundlett
   Western Washington Agricultural Association
   2017 Continental Place, Suite 6
   Mount Vernon, WA 98273
   (360) 424-7327

4. Date checklist prepared:
   May 2008

5. Agency requesting checklist:
   Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable):
   Tidegate and floodgate maintenance activities will only begin with the accrual of sufficient estuary restoration habitat credits (anticipated to occur in the summer of 2008) and will continue for the duration of the Agreement. The Agreement will be in effect for 25 years from the date of signature by each Drainage District, and upon signature by the Western Washington Agricultural Association (WWAA), NOAA's National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS), and Washington Department of Fish and Wildlife (WDFW). It is anticipated that the Agreement will be signed in the second quarter of 2008. A complete discussion of habitat crediting requirements to complete maintenance actions is found in the ***"Skagit Delta Tidegates and Fish Initiative Implementation Agreement"*** *document.*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
   The Agreement will be managed by an Oversight Committee. The Oversight Committee shall be composed of a representative(s) from each of the following entities: WDFW, NMFS, District Commissioners (two) (to be selected by the duly elected Commissioners of all Districts signatory to the Agreement), WWAA, and an invited tribal representative to be selected by the Skagit area Tribes. Any changes to the Agreement will be addressed through this Committee, and through approval by the signatory parties. The scope of the Agreement, maintenance on the tidegate and floodgate infrastructure covered under the agreement, is not anticipated to change.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Skagit Basin Comprehensive Irrigation District Management Plan, October 2006.
Non-project SEPA review for the adoption of the Skagit Delta Tidegates and Fish Initiative Implementation Agreement, completed February 2008.
Skagit Delta Tidegates and Fish Initiative Implementation Agreement, Signature Draft May 2008.
ESA consultation: NMFS and USFWS, ongoing 2008.
Skagit Drainage and Fish Initiative Drainage Maintenance Plan documents for Diking, Drainage and/or Irrigation Districts.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No specific proposals are known at this time.

10. List any government approvals or permits that will be needed for your proposal, if known.

Permits and approvals for project actions will include: HPA from WDFW, Corps of Engineers Special Project Information Form (SPIF), Endangered Species Act and Essential Fish Habitat review, Coastal Zone Management certification (if needed), and Shoreline Exemption from Skagit and Snohomish counties.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The low-lying land in the Skagit delta requires tidegates and floodgates to provide adequate drainage to maintain agricultural activities. Tidegates are one-way check valves at the end of the drainage system that allow drainage water to flow to a marine natural watercourse (i.e. Skagit Bay, Swinomish Channel, Padilla Bay, and Samish Bay) during a low tide cycle and then close to prevent saltwater from entering a drainage system when the tide rises. Floodgate operation is similar to that of tidegates, with the exception that they allow water to flow outward from the drainage system into a freshwater natural watercourse (i.e. Skagit River, Samish River) while preventing water in a natural watercourse from back-flooding into a drainage system when the water elevation in the natural watercourse is higher than the floodgate.

Maintenance actions including both repair and replacement activities at 38 tidegate sites with 89 tidegates (Table 1) and 19 floodgate sites that contain 32 individual floodgates (Table 2) that are under the ownership or control of Drainage, Diking, and/or Irrigation Districts that are parties to the Agreement. Maintenance actions are segregated into three categories: minor repair, major repair and replacement. See Section 4.1 of the Agreement for a complete description of each repair type, or the discussion in 3.a.2. below. Major repair and replacement actions are covered through this SEPA review. Minor repair actions have undergone SEPA review through the Drainage and Fish Initiative and Drainage Maintenance Plans.

The maintenance action types are considered typical of work necessary to maintain the tidegate and floodgate drainage infrastructure within the watercourses of the Skagit and Samish River deltas. Many of these maintenance actions are anticipated and routinely performed as a part of regular operational inspections of the tidegates and floodgates by the district personnel or commissioners. Unanticipated maintenance actions for restoring the function of the tidegates and floodgates after storm events will be completed as soon as possible after the storm event.

These maintenance actions are managed through an Implementation Agreement, by and

between WWAA, WDFW, NMFS, USFWS and the Drainage, Diking, and/or Irrigation Districts, which stipulates that up to 2,700 acres of delta agricultural lands may be converted to estuarine habitat, and that such conversion, when and where appropriate, will be undertaken in a manner consistent with the objectives of the Skagit Chinook Recovery Plan, as approved and adopted by NMFS in December 2006. This conversion of delta agricultural land to estuarine habitat will provide habitat credits allowing maintenance actions to occur by addressing required conservation measures for those maintenance actions. As a means to facilitate linkage between the permitting of tidegate and floodgate maintenance activities and the achievement of estuarine habitat restoration and smolt production goals, a clearly defined credit banking process has been developed to provide a system of checks and balances to assure that the estuary restoration credits are in-place to allow the maintenance actions to occur (a complete description can be found in the Agreement).

In addition, the Implementation Agreement will facilitate the regulatory review process required to conduct maintenance activities on tidegate and floodgates under the ownership or control of the participating Drainage, Irrigation and Diking Districts.

Table 1. Tidegates by Dike or Drainage District and by Priority, 2008.

District	Site Id.	Name/Location	Size	Pipe	Lid	Maintenance
Priority 1 - Replacement anticipated in 2008						
18	31	NORTH EDISON	48"	PVC	FIBERGLASS	REPAIRED 1994/1998
18	31	NORTH EDISON	42"	PVC	FIBERGLASS	REPAIRED 1994/1998
22	7	RAWLINS ROAD	48"	PLASTIC	ALUMINUM	1988/NEEDS REPAIR
Priority 2 - Steel gates and steel or corrugated pipes						
5	40	JOE LEARY SLOUGH (LAND N. SIDE)	36"	STEEL PIPE	GALV STEEL	NEEDS REPAIR
19	46	BOAT BASIN TIDEGATE	36"	CORR	CAST	NEEDS NEW TUBE
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
22	17	WILEY SLOUGH	48"	CORR/PLASTIC	STEEL/ALUM.	NEEDS REPAIR
Priority 3 - Fiberglass or aluminum gates and steel or concrete pipes						
5	37	ALICE BAY	48"	CORR/FIBERGLASS	FIBERGLASS	1983 FIBERGLASS ENDS
5	37	ALICE BAY	48"	CORR/FIBERGLASS	FIBERGLASS	1983 FIBERGLASS ENDS
5	37	ALICE BAY	48"	CORR/FIBERGLASS	FIBERGLASS	1983 FIBERGLASS ENDS
5	37	ALICE BAY	48"	CORR/FIBERGLASS	FIBERGLASS	1983 FIBERGLASS ENDS
5	42	JOE LEARY/D'ARCY ROAD	12"	CORR	FIBERGLASS	
12	45	NO NAME SLOUGH	36"	CORR	FIBERGLASS	
12	103	NO NAME SLOUGH	30"	WOOD	FIBER/ALUM.	
12	103	NO NAME SLOUGH	30"	WOOD	FIBER/ALUM.	
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's

District	Site Id.	Name/Location	Size	Pipe	Lid	Maintenance
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
14	43	JOE LEARY SLOUGH	48"	CORR/PLASTIC	FIBERGLASS	UPGRADE 1970's & 80's
15	3	SULLIVAN SLOUGH BY-PASS	72"	CORR	ALUMINUM	
15	3	SULLIVAN SLOUGH BY-PASS	72"	CORR	ALUMINUM	
15	3	SULLIVAN SLOUGH BY-PASS	72"	CORR	ALUMINUM	
15	3	SULLIVAN SLOUGH BY-PASS	72"	CORR	ALUMINUM	
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
17	201	BIG DITCH	72"	STEEL	FIBERGLASS	REPAIRED 1989
19	53	HIGGINS SLOUGH/SWINOMISH	48"	CORR	ALUMINUM	REPAIRED 1989
19	54	C. KNUTSEN/SWINOMISH CHANNEL	24"	CORR	ALUMINUM	
19	76	HIGGINS SLOUGH/SWINOMISH	60"	CORR/FIBERGLASS	FIBERGLASS	
19	76	HIGGINS SLOUGH/SWINOMISH	60"	CORR/FIBERGLASS	FIBERGLASS	
19	76	HIGGINS SLOUGH/SWINOMISH	60"	CORR/FIBERGLASS	FIBERGLASS	
19	76	HIGGINS SLOUGH/SWINOMISH	60"	CORR/FIBERGLASS	FIBERGLASS	
19	76	HIGGINS SLOUGH/SWINOMISH	60"	CORR/FIBERGLASS	FIBERGLASS	
19	82	LITTLE INDIAN SLOUGH	48"	CORR/FIBERGLASS	FIBERGLASS	
19	82	LITTLE INDIAN SLOUGH	48"	CORR/FIBERGLASS	FIBERGLASS	
22	9	HALL SLOUGH	36"	CORR	ALUMINUM	SILTED IN
22	11	GENE KING/BROWN SLOUGH	36"	STEEL	ALUMINUM	NEEDS REPLACEMENT
22	12	BROWN SLOUGH/SKAGIT BAY	48"	STEEL	ALUMINUM	
22	12	BROWN SLOUGH/SKAGIT BAY	48"	STEEL	ALUMINUM	
22	12	BROWN SLOUGH/SKAGIT BAY	48"	STEEL	ALUMINUM	w/SCREW GATE
22	13	BROWN SLOUGH/FIR ISLAND RD	48"	CORR	FIBERGLASS	
22	14	DAVIS SLOUGH	48"	CORR	FIBERGLASS	
22	14	DAVIS SLOUGH	48"	CORR	FIBERGLASS	
Priority 4 - All components fiberglass, plastic or aluminum						
5	36	SHROEDER PLACE	48"	FIBERGLASS	FIBERGLASS	
12	77	TELEGRAPH SLOUGH/BALL PLACE	36"	CONCRETE	ALUMINUM	SILTED IN
12	77	TELEGRAPH SLOUGH/BALL PLACE	36"	CONCRETE	ALUMINUM	SILTED IN
12	79	INDIAN SLOUGH @ BEN WELTON	30"	PLASTIC	ALUMINUM	REPAIRED 1999
12	79	INDIAN SLOUGH @ BEN WELTON	30"	PLASTIC	ALUMINUM	REPAIRED 1999
12	80	LITTLE INDIAN SLOUGH/SISSON W	24"	CORR	ALUMINUM	NEED REPAIR
12	81	LITTLE INDIAN SLOUGH/SISSON E	24"	CORR	ALUMINUM	NEED REPAIR
12	95	NO NAME SLOUGH	48"	PLASTIC	ALUMINUM	REPAIRED 2003
12	101	LITTLE INDIAN SLOUGH/ERICKSON	24"	FIBERGLASS	FIBERGLASS	REPAIRED 1985
15	4	SWANSON SLOUGH	36"	PLASTIC	FIBERGLASS	REPAIRED 2003
15	5	WHITE SLOUGH	36"	PLASTIC	ALUMINUM	REPAIRED 2002
16	25	SOUTH EDISON	36"	FIBERGLASS	FIBERGLASS	REPAIRED 1982
16	25	SOUTH EDISON	36"	FIBERGLASS	FIBERGLASS	REPAIRED 1982
16	25	SOUTH EDISON	36"	FIBERGLASS	FIBERGLASS	REPAIRED 1982
16	35	HENRY FARM/EDISON SLOUGH	48"	PLASTIC	FIBERGLASS	REPAIRED 1999

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): **Flat**, rolling, hilly, steep slopes, mountainous, other . . . . . .

Sites are typically flat with sloped banks to the watercourses.

b. What is the steepest slope on the site (approximate percent slope)?

Variable by site.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Soils are variable throughout the Coverage Area. Soils are composed of a variety of silts, loams and gravel types. The Natural Resource Conservation Service's National Soil Information System describes the soils in the delta area as a combination of the Skagit series and the Sumas series. The Skagit series consists of very deep, poorly drained soils on flood plains and deltas. Drainage has been altered by use of tile and open ditches. These soils are subject to flooding. They formed in recent alluvium and volcanic ash. Slopes are 0 to 1 percent. The Sumas series consists of very deep, poorly drained soils on flood plains and deltas. Drainage has been altered by tiling. These soils are subject to flooding. They formed in alluvium. Slopes are 0 to 2 percent. Elevation is 0 to 50 feet. The majority of the sites are farmland or on the margin of farm fields.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None known.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Repair of rock armoring or thresholds is required when existing rock has shifted, or a storm event has caused erosion at the structure. Repair work typically involves the repositioning of existing rock that has shifted. In some circumstances, new rock may need to be imported to the repair site, typically 10 cubic yards or less, to restore the original footprint of the rock armoring. A maximum of 10 cubic yards of new angular rock may be imported to the site to restore the original footprint of the rock armoring.

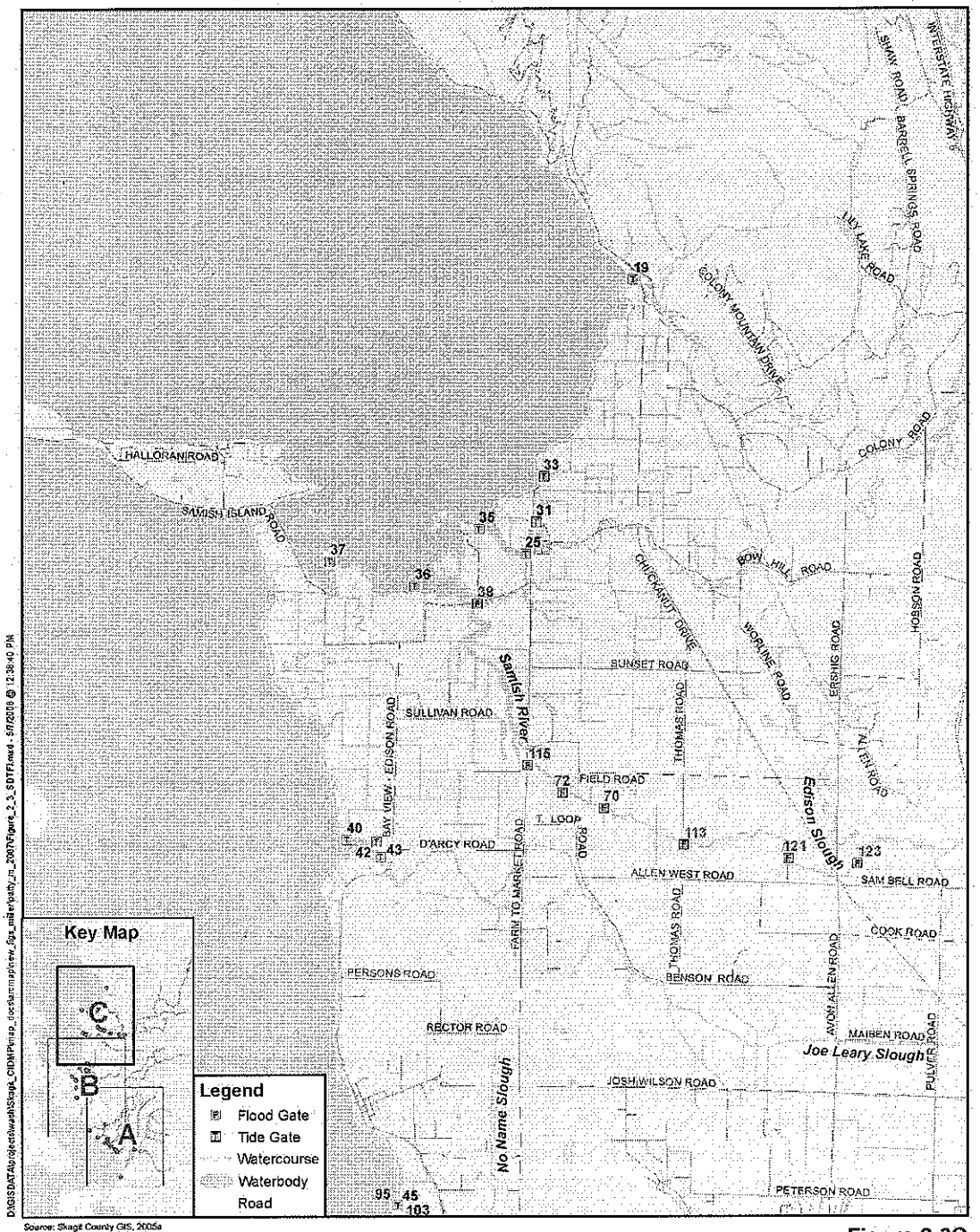
For the replacement of a new tidegate or floodgate tube, or the repair of a liner, excavated material is replaced in kind, within the existing footprint. Additional new material may be required to replace some of the excavated material as 100% of the material can not be collected and replaced. The amount of new material required is typically less than 50 cubic yards. Total excavation for full replacement of a tidegate averages approximately 175 cubic yards. If the number of tubes has been modified, e.g. four tubes replaced with three, the soil quantities excavated and replaced will vary, but the overall footprint and function of the tidegate or floodgate structure will remain the same. Any spoils are disposed of at an upland location.

Source of fill will be from local suppliers or quarries.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion could occur on the exposed soils excavated to replace a tube or repair a liner. The repair and replacement actions occur over a very short timeframe, typically one tidal cycle, so the potential for erosion is limited.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?


Key Map
C
B
A
Legend
Flood Gate
Tide Gate
Watercourse
Waterbody
Road
Source: Skagit County GIS, 2005a
May 2008
HDR
0 3,000 6,000 12,000
Feet
Figure 2-3C
Tidegates and Floodgates within the Coverage Area, By Site ID. Number
Skagit Delta Tidegates and Fish Initiative - Implementation Agreement May 2008
HALLORAN ROAD
SAMISH ISLAND ROAD
COLONY MOUNTAIN DRIVE
COLONY ROAD
LILY LAKE ROAD
BARRELL SPRINGS ROAD
SMITH ROAD
INTERSTATE HIGHWAY 5
BOW HILL ROAD
CHUCKANUT DRIVE
WORLINE ROAD
ERSHIG ROAD
HOBSON ROAD
SUNSET ROAD
SULLIVAN ROAD
EDISON ROAD
SAY VIEW
Samish River
THOMAS ROAD
FIELD ROAD
T LOOP
D'ARCY ROAD
FARM TO MARKET ROAD
ALLEN WEST ROAD
ALLEN ROAD
Edison Slough
SAM BELL ROAD
COOK ROAD
PERSONS ROAD
BENSON ROAD
AVON ALLEN ROAD
RECTOR ROAD
MAIBEN ROAD
PULVER ROAD
Joe Leary Slough
No Name Slough
JOSH WILSON ROAD
PETERSON ROAD
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113
121
123
95
45
103

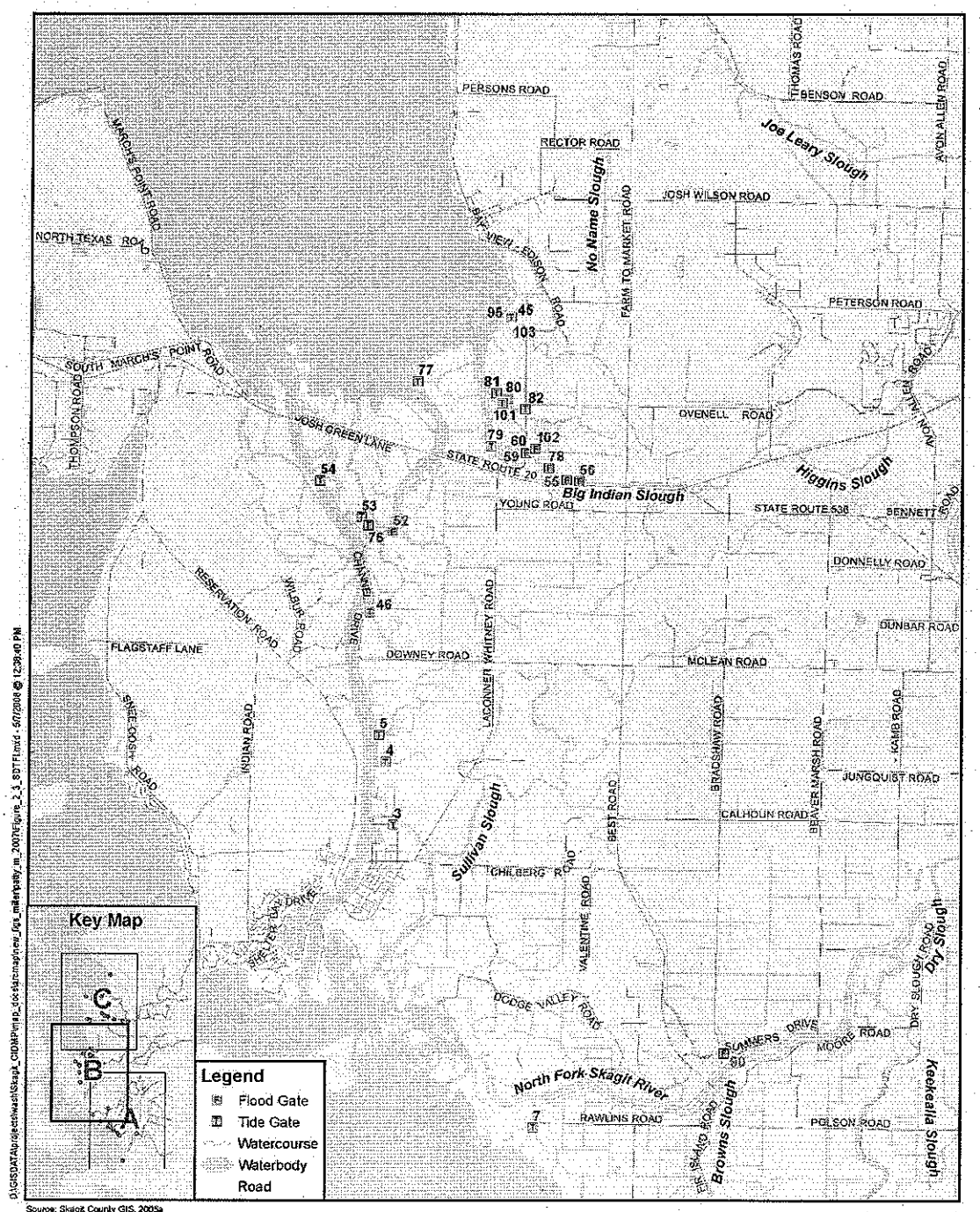

Figure 2-3B
Tidegates and Floodgates within the Coverage Area, By Site ID. Number

May 2008

HDR

Skagit Delta Tidegates and Fish Initiative - Implementation Agreement May 2008

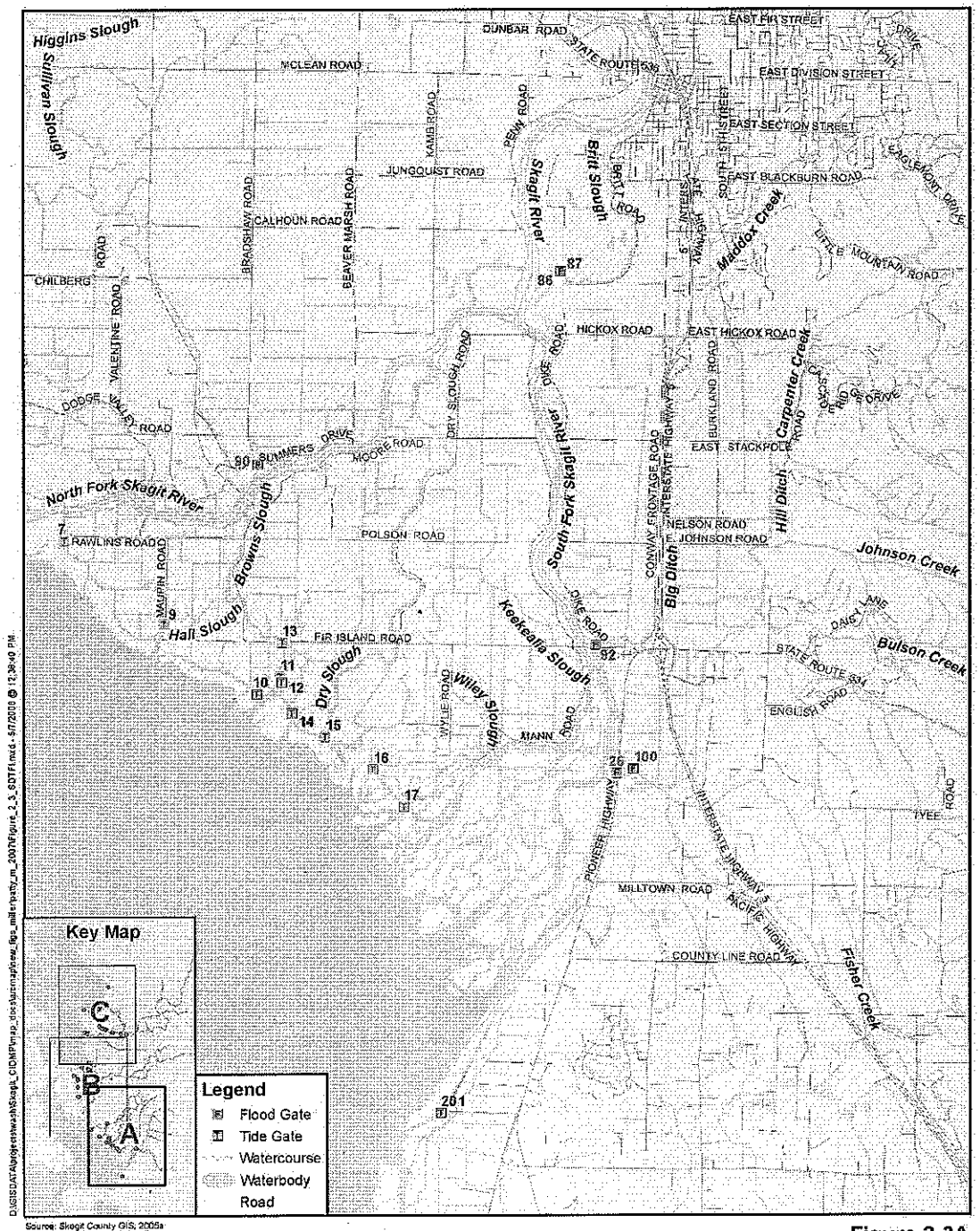

Figure 2-3A
Tidegates and Floodgates within the Coverage Area, By Site ID. Number

Skagit Delta Tidegates and Fish Initiative - Implementation Agreement May 2008

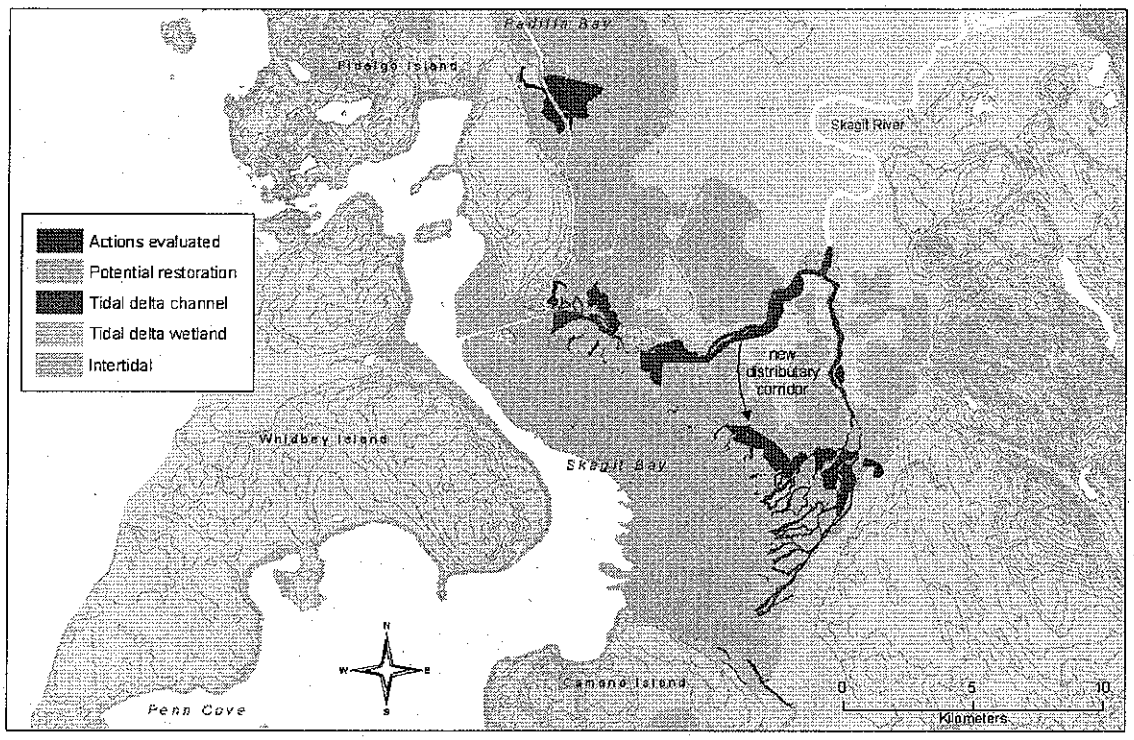

Figure 2. Implementation Agreement Restoration Area as depicted in Beamer et al. 2005; Appendix D Skagit Chinook Recovery Plan: Figure 7.1. Potential tidal delta restoration. Location of existing delta habitats that are easily accessible to delta rearing Chinook salmon (yellow and blue polygons) and the location of delta restoration actions evaluated in this document (pink polygons). Polygons shown as "potential restoration" are areas where is it geomorphically possible to restore to tidal delta habitat (based on the historic limit of tidal delta habitat from Collins 2000).

Many of the tidegates are sited in a facility complex that is composed of multiple gates. The Agreement addresses 38 tidegate complexes composed of 89 individual tidegates, and 19 floodgate complexes composed of 32 individual floodgates. Locations of these complexes are depicted on Figures 2-3 A, B, and C (Figures from the "Signature Draft" of the Agreement prepared May 28, 2008).

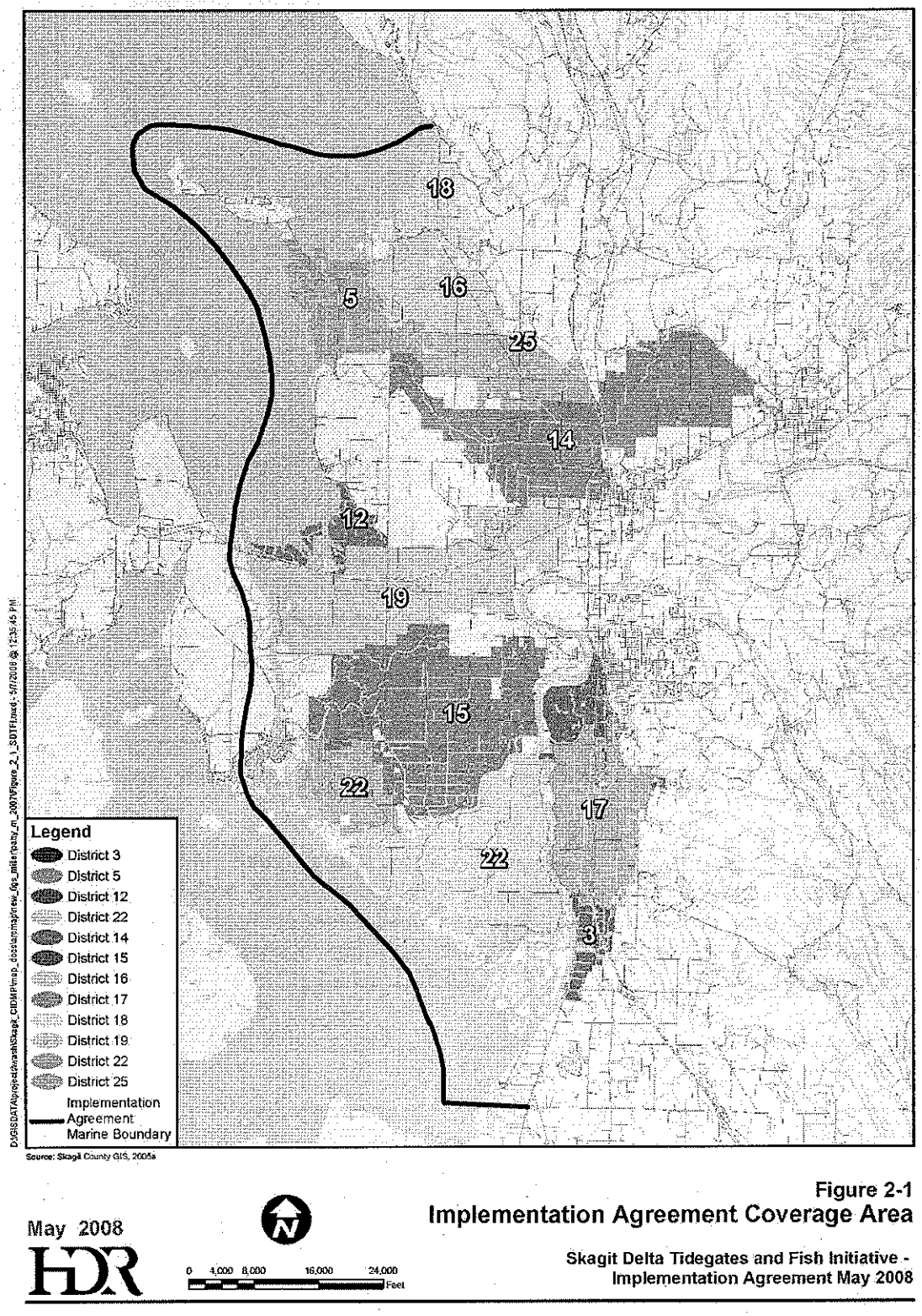

Figure 1. Implementation Agreement Coverage Area.

District	Site Id.	Name/Location	Size	Pipe	Lid	Maintenance
16	35	HENRY FARM/EDISON SLOUGH	48"	PLASTIC	FIBERGLASS	REPAIRED 1999
16	35	HENRY FARM/EDISON SLOUGH	48"	PLASTIC	FIBERGLASS	REPAIRED 1999
16	35	HENRY FARM/EDISON SLOUGH	48"	PLASTIC	FIBERGLASS	REPAIRED 1999
18	33	KNUTZEN FARM	48"	FIBERGLASS	FIBERGLASS	REPAIRED 1992
18	19	MCELROY SLOUGH	48"	CORR	FIBERGLASS	NEW GATE 1998
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
19	60	INDIAN SLOUGH DAM	48"	CONCRETE	ALUMINUM	
22	10	GENE KING/SKAGIT BAY	30"	PLASTIC	FIBERGLASS	
22	15	DRY SLOUGH	48"	GALV/PLASTIC	FIBERGLASS	REPAIRED 2002
22	15	DRY SLOUGH	48"	GALV/PLASTIC	FIBERGLASS	REPAIRED 2002
22	16	WILEY SLOUGH	36"	PLASTIC	PLASTIC	
TOTAL			89			

Table 2. Floodgates by Dike or Drainage District and by Habitat Tier.

District	Site Id.	Name	Size	Pipe	Lid	Maintenance
Tier 1 – Marine/fresh water connection, fish present (habitat credit required)						
3	26	FISHER SLOUGH/SKAGIT RIVER	10'X15'	STEEL	WOOD	
3	26	FISHER SLOUGH/SKAGIT RIVER	10'X15'	STEEL	WOOD	
3	26	FISHER SLOUGH/SKAGIT RIVER	10'X15'	STEEL	WOOD	
Tier 2 – Fresh water to fresh water connection, fish present, operated to improve water quality in fish bearing water (no credit required for maintenance, operation for water quality improvement fulfills conservation measures)						
17	92	KAYTON'S SLOUGH (CONWAY)	36"	CORR	CAST IRON	MANUAL SCREW
Tier 3 – Non-fish bearing waters (no credit required for maintenance)						
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
3	100	FISHER SLOUGH	5'X6'	CONCRETE	ALUMINUM	
5	38	SAMISH RIVER (WEST OF BRIDGE)	48"	PLASTIC	FIBERGLASS	
5	38	SAMISH RIVER (WEST OF BRIDGE)	48"	PLASTIC	FIBERGLASS	
5	38	SAMISH RIVER (WEST OF BRIDGE)	48"	PLASTIC	FIBERGLASS	
5	38	SAMISH RIVER (WEST OF BRIDGE)	48"	PLASTIC	FIBERGLASS	
15	90	REXVILLE - NF	24"	CORR	STEEL	NEEDS REPAIR
15	90	REXVILLE - NF	48"	CORR	STEEL	NEEDS REPAIR
17	86	BRITT SLOUGH				
17	87	BRITT SLOUGH				
19	52	HIGGENS SLOUGH/JENSEN	24"			
19	55	INDIAN SLOUGH/SCALE	30"			
19	55	INDIAN SLOUGH/SCALE	30"			
19	56	INDIAN SLOUGH/SR20	36"			
19	56	INDIAN SLOUGH/SR20	36"			

19	59	INDIAN SLOUGH/DAHLSTEDT	24"			
19	78	INDIAN SLOUGH/JONES 3	30"	CORR/ALUM	ALUMINUM	
19	102	INDIAN SLOUGH				
25	70	SAMISH RIVER	12"	CORR/STEEL	STEEL	
25	72	SAMISH RIVER	48"	CORR/STEEL	STEEL	
25	113	EGBERT/SC DITCH/E THOMAS RD	48"	CORR/STEEL	STEEL	
25	123	SAMISH RIVER/LAUTENBACH	36"	CORR/STEEL	ALUMINUM	
25	121	SAMISH RIVER/OMDAL LANE	48"	CORR/STEEL	ALUMINUM	
25	115	SAMISH RIVER/FARM TO MARKET RD	48"	CORR/STEEL	ALUMINUM	
TOTAL			32			

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Coverage Area for tidegate and floodgate repair and maintenance actions as defined under the Agreement is comprised of approximately 53,322 acres of farmland in the Skagit and Samish River deltas located in the western portion of Skagit County, Washington and a limited area in northwest Snohomish County, Washington; including the tidal delta areas of Skagit Bay, Padilla Bay, Samish Bay and the Swinomish Channel (Figure 1). These project areas are inclusive of the historic estuarine wetlands, downstream migration corridors, and connectivity corridors such as the Swinomish Channel. This area is inclusive of the jurisdictional boundaries and jurisdictional responsibilities of Drainage and Irrigation Districts 5, 14, 15, 16, 17, 18, 19, 22, 25; Consolidated Diking District 22; and Diking, Drainage and Irrigation District 12, all of which control lands historically subject to tidal influence within the Skagit and Samish River deltas, as well as Diking District 3, which has drainage interests within tidally influenced zones that lay within the same geographic area. The Coverage Area is bounded by the towns of Sedro-Woolley, Burlington, and Mount Vernon on the east and Samish and Padilla Bays and the Swinomish Chanel on the west.

An estuarine restoration area (based on the work of the Skagit Chinook Recovery Plan) for the Agreement is identified in Figure 2. The estuary restoration projects to be completed in the restoration area will be conducted outside of this Agreement and will undergo independent SEPA and other environmental review.

T32, 33, 34, 35 & 36
R 02, 03 & 04
S - multiple

No change in impervious surface will occur.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

- *Disturbance of vegetation in and along the watercourses at project sites shall be held to the absolute minimum necessary to repair or replace the tidegate or floodgate.*
- *Disturbed soils at the project site shall be protected from erosion using vegetation and/or other means.*
- *With the exception of materials used to construct the cofferdams, substrate materials excavated for the purpose of repairing and/or replacing a tidegate or floodgate shall be stockpiled above ordinary high water line (OHW). Under no circumstances shall excavated materials be stockpiled below OHW.*

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Temporary impacts could occur from dust emissions caused by clearing, excavation, uncovered stockpiles and other activities. Localized increases in exhaust emissions from equipment and vehicle operation would occur during maintenance; however, emissions would not likely be great enough to noticeably affect air quality.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None are known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Fugitive dust impacts associated with maintenance activities are not anticipated to be significant. Climate conditions in the area would reduce risks related to fugitive dust. Contractors would implement appropriate dust control measures, as necessary. Measures to minimize fugitive dust emissions from maintenance activities could include:

- *Spray exposed soil and storage areas with water during dry periods.*
- *Cover soil stockpiles with plastic or other appropriate cover.*
- *Cover loads of excavated material being transported from the site.*
- *Sweep and/or wash dirt/mud from vehicles prior to leaving the area.*
- *Remove soil and mud deposited on public roads.*

Vehicular emissions associated with maintenance activities are anticipated to be short-term in nature. Measures to minimize vehicular emissions could include:

- *Use flaggers at roadways to reduce queuing time.*
- *Perform proper vehicle/equipment maintenance.*

3. WATER

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. All project sites are located on tidally influenced freshwater. The water bodies in the Coverage Area are classified using a system designed by the WDFW, the Skagit River System Cooperative, and WWAA for use in the Skagit Drainage and Fish Initiative. This watercourse classification system is used here for consistency, to avoid confusion, and to facilitate cooperation and compatibility with other plans. All of the tidegate and floodgate

sites are located between a Natural Watercourse and either a Managed Watercourse with Headwaters, Managed Watercourse without Headwaters or an Artificial Watercourse.

The following categories are used to classify water bodies in the Coverage Area:

- *Natural Watercourse: Watercourses with headwaters that follow and/or replace a historic natural watercourse that has been altered, channelized, relocated, and/or constrained by dikes and that do not have flow control structures (tide gates, pump stations) at their confluence with marine waters.*
- *Managed Watercourse with Headwaters: Watercourses with headwaters that follow and/or replace a historic natural watercourse that has been significantly channelized, relocated, and/or constrained by dikes and that have flow control structures (tide gates, pump stations) at their confluence with marine waters (otherwise referenced as "altered watercourses" in Chapter 77.55 RCW).*
- *Managed Watercourse without Headwaters: Watercourses without headwaters that follow and/or replace a historic natural watercourse that has been significantly channelized, relocated, and/or constrained by dikes and that have flow control structures (tide gates, pump stations) at their confluence with marine waters (otherwise referenced as "altered watercourses" in Chapter 77.55 RCW).*
- *Artificial Watercourse: Watercourses without headwaters that are wholly built by humans and that do not follow or replace a historic natural watercourse, and are designed to convey water from local surface areas or subsurface drains for the purpose of removing excess water in order to improve conditions for agriculture.*

Table 3 includes watercourses designated as natural, managed with headwaters, and managed without headwaters. Artificial watercourses were not included in the table because they are not named and do not have any distinctive property that serves as a reference. Marine waters are not included in the watercourse classification system developed by the Skagit Drainage and Fish Initiative, but are included in Table 3 for reference purposes.

Table 3. Watercourses in the Coverage Area by Classification

Watercourse Name	Natural	Managed with Headwaters	Managed without Headwaters	Marine Waters
SKAGIT RIVER	X			
SOUTH FORK SKAGIT RIVER	X			
NORTH FORK SKAGIT RIVER	X			
SAMISH RIVER	X			
JOHNSON CREEK	X			
BULSON CREEK	X			
SWEDE CREEK	X			
PARSON CREEK	X			
CARPENTER CREEK		X		
FISHER CREEK		X		
MADDOX CREEK		X		
FLOWERS CREEK		X		
MARTHA WASHINGTON CREEK		X		
THOMAS CREEK		X		

Table 3. Watercourses in the Coverage Area by Classification				
Watercourse Name	Natural	Managed with Headwaters	Managed without Headwaters	Marine Waters
FORNSBY CREEK		X		
TELEGRAPH SLOUGH	X			
STEAMBOAT SLOUGH	X			
EDISON SLOUGH		X	X	
JOE LEARY SLOUGH			X	
NO NAME SLOUGH		X		
HIGGINS SLOUGH		X		
GAGES SLOUGH		X		
BIG INDIAN SLOUGH		X		
BIG DITCH		X		
HILL DITCH		X		
DRY SLOUGH			X	
BROWNS SLOUGH			X	
SULLIVAN SLOUGH			X	
KEEKEALIA SLOUGH			X	
WILEY SLOUGH			X	
HALL SLOUGH			X	
LITTLE INDIAN SLOUGH			X	
DAVIES SLOUGH			X	
TEAL SLOUGH			X	
DODGE SLOUGH			X	
BRITT SLOUGH			X	
KAYTON'S SLOUGH			X	
SWANSON SLOUGH			X	
WHITE SLOUGH			X	
SWINOMISH CHANNEL				X
PADILLA BAY				X
SKAGIT BAY				X
SAMISH BAY				X

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes.

Major Repair

Major repair actions include all maintenance activities not categorized as minor repair, with the exception of replacement and installation of liners required to keep the tidegates and floodgates operational. These actions include, but are not limited to: the replacement of doors and collars; repair of discharge pipes and tubes; repair of rock armoring or thresholds; and, in rare instances, debris removal requiring the access of heavy equipment within the watercourse. Major repairs shall not include actions that require excavation of the dike or levee to accomplish the repair.

Replacement of doors may require the use of heavy equipment, such as a boom truck or excavator, depending on the type of door, size and material. Any heavy equipment used is staged and operated from the dike or bridge. The door is suspended over the dike, near the tube opening, and is manually connected to the collar. Work is conducted during a low tide cycle and no cofferdam is required.

Replacement of collars is rarely necessary, but in instances when a collar requires replacement, the work is performed manually during a low tide cycle and no cofferdam is required.

Discharge pipe or tube repair consists of patching holes or cracks in the protruding ends on either side of the dike. The damaged area is patched with cement or fiberglass, depending on the composition of the pipe or tube. Patches are typically used to repair small holes or cracks. If the damaged area is large enough that a patch will not work the protruding end of the pipe will be encased in cement. These are typically temporary repairs to prolong the life of the pipe or tube until it can be replaced. These repairs are completed manually during a low tide cycle and no cofferdam is required. If equipment is needed, such as a cement truck, it will be staged and operated from the supporting/associated dike or bridge.

Repair of rock armoring or thresholds is required when existing rock has shifted, or a storm event has caused erosion at the structure. Repair work typically involves the repositioning of existing rock that has shifted. In some circumstances, new rock may need to be imported to the repair site typically, 10 cubic yards or less, to restore the original footprint of the rock armoring. Equipment is staged from the associated dike or bridge.

The need to operate equipment within the watercourse for debris removal is very rare. Typically, all debris can be removed either manually or with equipment staged on the bank. Operation of equipment within the watercourse for the removal of debris shall only occur to prevent the loss of a tidegate or floodgate structure, including the dike or bridge supporting that structure. This action will be completed during one low tide cycle. If the equipment enters the channel then the site where the equipment enters the channel will be isolated from the rest of the channel and salmon removal implemented. If water is flowing in the channel, then the flow will need to be bypassed around the isolated area.

Replacement

Replacement of tidegates is occasionally necessary, and usually involves the replacement of tubes to extend the life of the gate facility or to restore impaired function. Tubes typically collapse due to corrosion. Replacement of tubes is typically completed during the late summer to early fall months to coincide with the occurrence of extreme low tides during daylight hours.

The replacement of a tidegate tube requires the excavation of the dike to provide access to the tube. This action is completed during one low tide cycle, and must be completed quickly to prevent intrusion of saltwater into the work area. The locations of the majority of the floodgates are affected by tidal height such that replacement actions at floodgates will also be completed at low tidal cycles. To secure the work area, and to provide a dry work environment, the area upstream of the tube will be cofferdamed to prevent drainage water from entering (depending on drainage occurring at the time of the replacement) the work area. A downstream cofferdam will also be installed to isolate the work area from the

watercourse. The existing tube(s) requiring replacement is then excavated with equipment staged on the dike or shoreline, above the OHW or mean high water (MHW) elevation. Excavated material is stockpiled upland for replacement in the dike once the new tube is in-place. Material is placed in a location where it will not enter the waters of the State, including wetlands. Once the new tube is placed, the excavated material is then replaced in kind, within the existing footprint. Additional new material may be required to replace some of the excavated material as 100% of the material can not be collected and replaced. The amount of new material required is less than 50 cubic yards. Total excavation for full replacement of a tidegate averages approximately 175 cubic yards. If the number of tubes has been modified, e.g. four tubes replaced with three, the soil quantities excavated and replaced will vary, but the overall footprint and function of the tidegate or floodgate structure will remain the same. Any spoils are disposed of at an upland location. No construction debris or deleterious materials will be disposed of or abandoned on-site.

The installation of liners requires that the dike be partially excavated, which requires that this activity be included within replacement actions. Lining of a tube consists of installing a liner to the inside section of the tube where corrosion typically occurs. To line an existing tube with new material, the work must be conducted during a low tide cycle when the tube can be easily accessed. Any debris in the existing tube is removed so that the liner will fit properly. The new lining material is installed within the existing tube by utilizing a boom truck or other equipment that can lift and suspend the new liner over the watercourse near that tube opening. The equipment is staged from the dike (or bridge) and does not enter below the OHW or MHW elevation. Once the liner is in position it is manually placed in alignment with the tube and then secured to the existing tube. The new liner is grouted into place to provide a seal between the tube and the liner. The dike is partially excavated to create access to the tube so that the liner can be grouted. The tube is then opened to provide access to the void between the tube and the liner. A grout material, such as concrete slurry, is then pumped into the void between the tube and the liner. This grout material seals the liner to the tube. Liner installation is completed during one low tide cycle, all equipment is staged from the dike and a cofferdam is not required.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Source of fill will be from local suppliers or quarries. The type of material an amount for each is described below:

Major Repair

In some circumstances, new rock may need to be imported to the repair site typically, 10 cubic yards or less, to restore the original footprint of the rock armoring.

Replacement

Additional new material may be required to replace some of the excavated material as 100% of the material can not be collected and replaced. The amount of new material required is typically less than 50 cubic yards. Total excavation for full replacement of a tidegate averages approximately 175 cubic yards. If the number of tubes has been modified, e.g. four tubes replaced with three, the soil quantities excavated and replaced will vary, but the overall footprint and function of the tidegate or floodgate structure will remain the same.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Temporary water diversion may be required for major repair or replacement actions. Maintenance actions are proposed to occur during extreme low tide cycles minimizing water management actions. Whenever water is present in the upstream or downstream watercourse, a temporary cofferdam shall be installed upstream or downstream of the tidegate/floodgate prior to initiating any excavation activity below OHW line in order to isolate the project site from the watercourse. The cofferdams may be constructed from substrate materials imported to the site or from substrate materials excavated from the existing dike above OHW line. Under no circumstances shall substrate materials be excavated below OHW line from the watercourses for the purpose of constructing the cofferdams.

If it is necessary to use a pump to divert water from the watercourse around the project area, the pump intake shall be enclosed with a screen material where the narrow dimension of the rectangular slots or mesh does not exceed 0.25 inch to prevent juvenile fish from entering the pump system. The screened area shall have enough surface area to ensure that the velocity through the screen does not trap fish on the screen surface. The screen shall remain in place whenever water is withdrawn from the watercourse through the pump intake.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, all sites are within the 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, the proposal would not involve any discharges of waste materials to surface waters.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No water would be withdrawn, nor will be discharged to groundwater.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff from the project sites would be limited to storm water. Construction sites will be minimized to the extent possible to conduct maintenance actions, and the construction period will be limited due to the need to complete maintenance actions within a tidal cycle. No change in the existing flow of storm water is anticipated from the maintenance actions.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

- *Any excavation activity below OHW line shall be conducted to the maximum extent possible during low tide cycles in the downstream watercourse.*
- *Motorized equipment used to repair or replace a damaged tidegate or floodgate shall only be operated above OHW line.*
- *Disturbance of vegetation in and along the watercourses at the project site shall be held to the absolute minimum necessary to repair or replace the damaged tidegate or floodgate.*
- *Disturbed soils at the project sire shall be protected from erosion using vegetation and/or other means.*
- *With the exception of materials used to construct the cofferdams, substrate materials excavated for the purpose of repairing and/or replacing a tidegate or floodgate shall be stockpiled above OHW line. Under no circumstances shall excavated materials be stockpiled below OHW line.*
- *Under no circumstance shall substrate materials below OHW line be recruited from the watercourses for project construction.*
- *The damaged elements of the tidegate or floodgate shall be removed from the project area and deposited upland such that they do not enter the watercourse.*
- *All treated piling or lumber used to repair or replace a trash rack shall be professionally treated and completely cured prior to installation below OHW line to minimize leaching into the water or substrate. Under no circumstances shall creosote or pentchlorophenol treated piling or lumber be used for project construction.*
- *Trash, plant debris, sticks and other debris removed from the tidegate, floodgate or trash rack shall be deposited upland such that they do not enter the watercourse. Drift logs with a stem diameter greater than 6 inches shall be relocated away from the tidegate, floodgate or trash rack but maintained below OHW line.*
- *Wet concrete shall be prevented from entering waters of the state. Forms for any concrete structure shall be constructed to prevent leaching of wet concrete. Impervious materials shall be placed over any exposed concrete not lined with the forms that will come in contact with state waters. Forms and impervious materials shall remain in place until the concrete is cured.*

4. PLANTS

a. Check or circle types of vegetation found on the site:

__X__ deciduous tree: alder, maple, aspen, other
__X__ evergreen tree: fir, cedar, pine, other
__X__ shrubs
__X__ grass
__X__ pasture
__X__ crop or grain
_____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
__X__ water plants: water lily, eelgrass, milfoil, other
_____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The vegetation at the project sites is variable. These sites are situated on a variety on watercourse types and as such have a variety of adjoining plant communities. Many of the sites are predominantly vegetated with reed canary grass.

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to occur in the Coverage Area.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Disturbance of vegetation in and along the watercourses at the project site shall be held to the absolute minimum necessary to repair or replace the damaged tidegate or floodgate.
Disturbed soils at the project site shall be protected from erosion using vegetation and/or other means.

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver other:
fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

Marbled Murrelets:

Review of the Priority Habitat and Species mapping data provided by WDFW indicates that the nearest detection location is approximately 3 miles from the Coverage Area's northeastern boundary. With inclusion of the adjacent buffer (0.75 mile to the detection site), the outer margin of the buffer section is within approximately 1.5 miles of the northeastern Coverage Area boundary. Review of the USFWS on-line critical habitat mapper indicates that the nearest designated critical habitat area is approximately 12.6 miles from the eastern Coverage Area boundary. Marbled murrelets could occur on the marine waters.

Bull Trout:

In the Skagit River, juvenile and sub-adult bull trout migrate downstream between April and July at 2 or 3 years of age, although the range of seasonal timing of entry extends from mid-February to early September. The peak of the migration occurs in May and June.

Within Skagit Bay, bull trout are essentially present year-round. Peak abundance usually occurs in May or June; however, in recent years (coinciding with higher overall abundance) there appears to be a bi-modal distribution where significant numbers of bull trout are present in Skagit Bay during the fall months. Bull trout are more consistently associated with spit habitat throughout the year than any other habitat type, with stable bluffs a strong secondary habitat feature. Bull trout are found occupying coastal lagoon habitat in July.

No spawning is documented within the Coverage Area.

The Samish River contains important foraging, migration, and overwintering habitat necessary for bull trout recovery. The Samish River habitat is especially important to bull trout populations that occur in the Nooksack and Skagit River systems. Adult and sub-adult bull trout have been caught on the main stem of the Samish River upstream of the confluence with Friday Creek, as well as in the lower river; however, it is likely that potential use extends to the uppermost reaches of

anadromous salmon use. These are likely anadromous bull trout from the Nooksack and Skagit core areas due to their close proximity.

Chinook Salmon:
Fall, spring, and summer Chinook salmon occur within the Skagit River system, and fall Chinook occur within the Samish River. There are six different Chinook salmon populations recognized in the Skagit Basin. These six populations are: lower Skagit, upper Skagit, lower Sauk, upper Sauk, Suiattle, and upper Cascade populations. Within the Coverage Area critical habitat for the Puget Sound Chinook ESU occurs within the Coverage Area. The entire Samish River watershed was excluded from the Critical Habitat designation for Puget Sound Chinook salmon.

Steelhead Trout:
Winter and summer populations of steelhead trout occur within the Skagit River system. Six populations of steelhead are described in the Skagit Basin: three populations of winter steelhead and three populations of summer steelhead. All of the winter steelhead populations are described as being native in origin with wild production. The Skagit main stem/tributaries winter steelhead population declined from a healthy status in 1992 to a depressed status in 2002.

In the Samish River, one population of winter steelheads occurs. This population spawns throughout the Samish River and in Friday Creek and its tributaries. This is described as native stock with wild production. The status of this stock is described as healthy.

Killer Whale:
Killer whales are present in coastal waters and within Puget Sound. The southern resident orcas consist of three pods, identified as J, K, and L pods. These pods reside for part of the year in the inland waterways of the Strait of Georgia, Strait of Juan de Fuca, and Puget Sound, especially during the spring, summer, and fall. The population travels more extensively during other times of the year to sites as far north as the Queen Charlotte Islands in British Columbia and as far south as Monterey Bay in California.

c. Is the site part of a migration route? If so, explain.
The Coverage Area is within the Pacific Flyway, an avian migratory corridor consisting of the western coastal areas of South, Central, and North America. The Skagit Delta supports large concentrations of wintering waterfowl, shorebirds, and raptors. A significant portion of an entire trumpeter swan population winters in this area, as well as the entire population of gray-bellied brant, a subpopulation of brant geese. Additionally, thousands of snow geese utilize fields in the area.

The water bodies in the Coverage Area are classified using a system designed by the WDFW, the Skagit River System Cooperative, and WWAA for use in the Skagit Drainage and Fish Initiative and are defined in Section 3a1. Natural Watercourses and Managed Watercourses with Headwaters within the Coverage Area are known to contain anadromous fish species and are considered migratory corridors. Table 4 shows the presence of anadromous fish species in each of the watercourses within the Coverage Area.

Table 4 Water Bodies within the Coverage Area and Fish Species Presence												
Watercourse	FC	SC	SuC	CO	SSH	WSH	BT	CCT	PINK	CHUM	SOCK	Critical Habitat*

Table 4 Water Bodies within the Coverage Area and Fish Species Presence												
Watercourse	FC	SC	SuC	CO	SSH	WSH	BT	CCT	PINK	CHUM	SOCK	Critical Habitat*
Skagit River	X	X	X	X	X	X	X	X	X	X	X	CHN/BT
South Fork Skagit River	X	X	X	X	X	X	X	X	X	X	X	CHN/BT
North Fork Skagit River	X	X	X	X	X	X	X	X	X	X	X	CHN/BT
Samish River	X			X		X	X	X		X	X	BT
Johnson Creek				X				X				
Bulson Creek				X				X				
Swede Creek	X			X		X						
Parson Creek				X		X						
Carpenter Creek	X			X	X	X	X	X				CHN
Fisher Creek/Slough	X			X	X	X		X		X		
Maddox Creek				X				X				
Flowers Creek				X				X				
Martha Washington Creek				X				X				
Thomas Creek	X			X		X		X		X		
Fornsby Creek	X	X	X				X	X		X		
Telegraph Slough	X	X	X				X	X		X		
Steamboat Slough	X				X	X				X		CHN
Edison Slough	X	X		X				X		X		
Joe Leary Slough	X	X		X			X	X		X		
No Name Slough				X				X				
Higgins Slough				X								
Big Indian Slough	X			X				X				
Big Ditch	X	X		X			X	X		X		
Hill Ditch	X	X		X	X	X	X	X		X	X	CHN
Dry Slough	X	X		X			X	X	X	X	X	
Browns Slough	X	X		X			X		X	X	X	CHN
Sullivan Slough	X			X			X		X	X		CHN
Keekealia Slough												
Wiley Slough				X			X					
Hall Slough	X			X					X	X		CHN
Little Indian Slough	X			X			X	X	X	X		
Davis Slough												
Teal Slough												
Dodge Slough												
Britt Slough	X											CHN
Kayton Slough	X	X		X			X	X		X		
Swanson Slough												
White Slough												
Swinomish Channel	X	X	X	X	X	X	X		X	X	X	CHN/BT
Padilla Bay	X	X	X	X	X	X	X		X	X	X	CHN/BT
Skagit Bay	X	X	X	X	X	X	X		X	X	X	CHN/BT
Samish Bay	X	X	X	X	X	X	X		X	X	X	CHN/BT

Sources: WDFW, 2005d; Williams, 2005; FR, 2005a; TAT, 2005

FC = fall Chinook, SC = spring Chinook, SuC = summer Chinook, CO = coho, SSH = summer steelhead, WSH = winter steelhead, BT = bull trout, CCT = coastal cutthroat trout, PINK = pink salmon, CHUM = chum salmon, SOCK = sockeye salmon, CHN = Chinook

*Watercourse has been designated as a Critical Habitat for the listed species.

d. Proposed measures to preserve or enhance wildlife, if any:

Maintenance Activity Measures:

Immediately prior to initiating any excavation activity below OHW line, the following fish removal protocols shall be implemented by a qualified biologist experienced and trained in the handling of fish; the qualified biologist shall supervise the capture and relocation of the fish at all times:

- *Whenever water is present in the upstream watercourse, a block net shall be installed immediately upstream of the proposed project area to prevent fish from migrating back into the project area during fish salvage and project activities.*
- *Whenever water is present in the downstream watercourse, a block net shall be installed immediately downstream of the proposed project area to prevent fish from migrating back into the project area during fish salvage and project activities.*
- *Fish shall be captured and safely moved from the project area using the best available methods and practices, including but not limited to dip netting, and seining. The preferred sequence of fish removal is to first install the upstream blocknet followed by a seine and/or dip netting efforts proceeding in the downstream direction. The downstream blocknet shall be moved, closely behind the seining crew. After establishing the downstream block net, additional sweeps of the project area with a seine is recommended. Fish handling techniques shall be implemented that result in the least amount of stress or damage to the captured fish.*
- *Captured fish shall be immediately and safely transferred to the watercourse downstream of the project reach.*
- *The task of capturing and immediately relocating fish for the purpose of excluding them from the project area shall not require a separate Scientific Collection Permit from the Washington Department of Fish and Wildlife.*

Maintenance activities will occur during low tide cycles to minimize the interaction with fish species and to reduce the potential for changes in water quality.

Long-term Measures:

For purposes of fulfilling the provisions of the TFI Implementation Agreement, WWAA and each participating District within the Skagit and Samish River deltas (which may include Drainage and Irrigation Districts 5, 14, 15, 16, 17, 18, 19, 22, 25; Diking and Drainage District 22; Diking, Drainage and Irrigation District 12, and Diking District 3) agree to support the conversion of up to 2,700 acres of delta agricultural lands as a means to achieve the estuarine habitat restoration and smolt production goals and objectives of the Federally approved Skagit Chinook Recovery Plan, as approved and adopted by NMFS in December 2006.

As a means to facilitate linkage between the permitting of tidegate and floodgate maintenance activities and the achievement of estuarine habitat restoration and smolt production goals, a clearly defined credit banking process has been developed to provide a system of checks and balances to assure that the estuary restoration credits are in-place to allow the maintenance actions to occur throughout the 25-year duration of this Agreement.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

No energy would be required for maintenance of the tidegates and floodgates

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None would be required.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Some risk of spills/leakage from heavy equipment would exist during maintenance activities. The use of concrete could also present a risk to water quality should wet concrete, or concrete leachate enter the waterway. Normal precautions would be taken in storing equipment, hazardous fuels, and other materials used.

1) Describe special emergency services that might be required.

None would be required.

2) Proposed measures to reduce or control environmental health hazards, if any:

To protect against hazardous substance spills from routine equipment operation and maintenance activities during maintenance of tidegates and floodgates, the contractor would conduct proper hazardous material storage, handling, and emergency procedures, including proper spill notification and response requirements. Wet concrete shall be prevented from entering waters of the state. Forms for any concrete structure shall be constructed to prevent leaching of wet concrete. Impervious materials shall be placed over any exposed concrete not lined with the forms that will come in contact with state waters. Forms and impervious materials shall remain in place until the concrete is cured.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

No existing noise in the area would affect the proposed maintenance activities.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Maintenance of tidegates and floodgates would generate limited temporary noise impacts caused by equipment operation associated with maintenance activities. Noise sources for the maintenance actions would occur from construction equipment such as; pick-up trucks, boom-truck, concrete truck, excavators, dump-trucks, back-hoes, and pile driver (very infrequent use, likely only for repair of trash racks). Noise generating activities would occur over short time periods as the maintenance actions are conducted around tidal cycles.

Many of the routine maintenance actions do not require heavy equipment. Use of heavy equipment that could generate noise would typical only occur during gate replacement actions. Noise would typically be generated during daylight hours. Emergency maintenance activities may need to be completed at night.

3) Proposed measures to reduce or control noise impacts, if any:
Because maintenance activity noise levels would be variable and short-term, contractors would implement the following measures to minimize disruption and inconvenience caused by the activities:
- *Encourage the adequacy of mufflers on all engines.*
- *Minimize the idling time of equipment and vehicle operation.*

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?
The large majority of the Coverage Area is zoned for agricultural uses and is currently used for agricultural production. Additional land uses within the coverage area range from single family residential to industrial.

b. Has the site been used for agriculture? If so, describe.
Yes. A crop survey conducted by Washington Department of Agriculture in 2005, as part of an ongoing state-wide study of agricultural use of pesticides, reported a total of 49,896 acres harvested within the Coverage Area. This represents 86 percent of the 58,155 acres zoned for agriculture in the Coverage Area and 94 percent of the 53,322 acres included in the districts.

c. Describe any structures on the site.
Structures occurring at tidegate and floodgate complexes may include pump stations buildings.

d. Will any structures be demolished? If so, what?
No structures will be demolished.

e. What is the current zoning classification of the site?
Zoning in the Coverage Area includes: Agriculture, Natural Resource Lands (Forest, Rural Resource), State/Federal and other Public Lands, Rural Lands, Commercial/Industrial Lands, and Urban Growth Areas.

f. What is the current comprehensive plan designation of the site?
Comprehensive plan designations of the Coverage Area include: Agriculture, Natural Resource Lands (Forest, Rural Resource), State/Federal and other Public Lands, Rural Lands, Commercial/Industrial Lands, and Urban Growth Areas.

g. If applicable, what is the current shoreline master program designation of the site?
Urban, Rural and Aquatic Shoreline Areas.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Critical Areas in Skagit County include; wetlands, aquifer recharge areas, flood hazard areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. Fish and wildlife conservation areas, wetlands and flood hazard areas do occur within the Coverage Area. Specific project sites are likely to contain fish and wildlife conservation areas as they are located within tidally influenced watercourses.

i. Approximately how many people would reside or work in the completed project?
Not applicable.

j. Approximately how many people would the completed project displace?
Not applicable.

k. Proposed measures to avoid or reduce displacement impacts, if any:
Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The land use would not change as a result of the proposed actions. Actions will support the current agricultural land use in the Coverage Area.

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.
b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.
c. Proposed measures to reduce or control housing impacts, if any:
None would be required because the proposal would not have any housing impacts.

10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
No new structures are proposed.
b. What views in the immediate vicinity would be altered or obstructed?
Views would not be altered or obstructed from the proposed actions.
c. Proposed measures to reduce or control aesthetic impacts, if any:
None.

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Maintenance activities would typically occur in during daylight hours. However, in the rare occurrence that activities are required to occur during nighttime hours, lighting would be required. There would be no long term impacts from light or glare.
b. Could light or glare from the finished project be a safety hazard or interfere with views?
No.
c. What existing off-site sources of light or glare may affect your proposal?
None.
d. Proposed measures to reduce or control light and glare impacts, if any:
All nighttime maintenance work, if needed, would be done in accordance with local jurisdiction requirements. All lighting would be shielded and directed away from potentially impacted properties.

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?
Within the Coverage Area both formal and information recreation occurs. Public owned lands are available for public access for activities such as bird watching, dog walking, hiking, picnicking and running. Some waterfowl hunting may also occur in the area.
b. Would the proposed project displace any existing recreational uses? If so, describe.
No.
c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None.

16. UTILITIES

a. Circle utilities currently available at the site: **electricity**, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
Electricity is present at some locations.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
No new utilities would be required for the proposal.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Mike Shelby, WWAA – on file

Date Submitted: 5/29/08

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
No known registered sites.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
A number of historic sites occur in or around Burlington, La Conner and Mount Vernon. These sites include a, library, police station, grange hall, church, bridge, residence and historic districts.

c. Proposed measures to reduce or control impacts, if any:
No historic structures or sites will be impacted from the proposed actions. If anything of cultural significance is encountered during maintenance activities, work would be halted immediately and the appropriate tribal, local, and state authorities would be notified.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
The tidegate and floodgate sites are primarily served by Skagit County roads and access roads on private land. State Highway 20 bisects the Coverage Area and runs east to west, Highway 11 occurs in the northern portion of the Coverage Area, and Highway 536 occurs in the center of the Coverage Area where it intersects with Highway 20.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No. The locations where maintenance activities will take place are not currently served by public transit.

c. How many parking spaces would the completed project have? How many would the project eliminate?
Not applicable.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
No new roads or streets would be required.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No. The project does not use water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
Inspection of the tidegate and floodgate sites would continue to occur as currently conducted. Sites are visited during routine maintenance inspections and following storm events.

g. Proposed measures to reduce or control transportation impacts, if any:
None.

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No additional demand or services would be required.

b. Proposed measures to reduce or control direct impacts on public services, if any.
None.