


Appendix Q: List of Recommended Salmon Recovery & Conservation Actions in Bainbridge Island Sub-Area

Note: Action items are grouped when similar, they are listed in no particular order, and Action ID does not indicate priority.

Action ID	Objectives	Description	Status/ Timeframe	Lead ¹	FTE, Cumulative Est. (.1 = 5 wks FT)	Non-staff Cost	Priority	Subwatershed ²	Stream Reach	Shoreline Management Area ³	Nearshore Reach	Fulfills Recommendation of Anther Plan or Legal Mandate
		Adaptive Management Actions (updates, monitoring, data gaps, etc)										
1	AM-1 AM-4	Review & update the Bainbridge Island Salmon Recovery and Conservation Sub-Area Plan <ul style="list-style-type: none">Update at least every 7-years										
		Task: Review and update BI Sub-Area Plan in preparation for 2011 Comprehensive Plan, CAO, and SSWM updates <ul style="list-style-type: none">Update subwatershed projects and prioritization when comprehensive subwatershed assessment is completedUpdate nearshore projects and prioritization following the update of the BI Nearshore Assessment (action 12) and completion of the SMMP update and mandatory shoreline restoration plan (action 9)	2009	NRT	.25	Unknown	High	All	All	All	All	GMA mandate: Provides best available science and basis for special consideration for anadromous fisheries
		Task: Review and update BI Sub-Area Plan in preparation for 2018 Comprehensive Plan, SMMP, CAO, and SSWM updates.	2016		.25	Unknown		All	All	All	All	
10	AM-2 AM-3	Comprehensive Water Quality and Stream Flow Monitoring Program <ul style="list-style-type: none">Design & pilot funded by Centennial Clean Water Grant, no funding dedicated yet to long term implementationAmbient level monitoring of WQ in all watersheds and shoreline management areas; exceedance of standards would trigger further investigationSeveral continuous in-stream flow gauges will be installed and other streams will likely be monitored using portable equipment. Stream flow monitoring should be coordinated with groundwater monitoring (action 13)Coordinated with state and local agenciesWill utilize volunteer stewards during implementation, as appropriateImplements part of recommendations of the BI Nearshore Assessment (Williams et al 2004, Appendix F)										
		Task: Design Monitoring Program <ul style="list-style-type: none">Review of historic dataWill try to be consistent with existing efforts & guidance, including WDFW/GSRO/SRFB/PSAMP monitoring recommendations	2005-2006	SSWM & SSP	.25	\$198,650 (grant) \$80,000 (COBI) Volunteers	High	All	All	All	All	
		Task: Pilot Implementation & Review <ul style="list-style-type: none">Includes full monitoring effort for 1 year in at least 2 watersheds and shoreline management areasProtocols and methods reviewed and revised based on pilotPilot Implementation Report	2006-2007		.25			TBD	-	TBD	-	
		Task: Full Implementation of program <ul style="list-style-type: none">11 subwatersheds (28 sq miles) and 9 shoreline management areas (53 miles)	2008 (begin) ongoing		.5 - 1	Unknown: Consultants Operations		All	All	All	All	


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		<ul style="list-style-type: none">Scientific basis for recommended actions and state-mandated policy & regulation updatesIntegrate findings into bi-annual report (action 2)				Equipment Volunteers						
11	AM-3	BI Sub-Watershed Assessment <ul style="list-style-type: none">Scientific basis for recommended actions and state-mandated policy & regulation updatesUpdate at least every 7-yearsIntegrate into future updates of East Kitsap Lead Entity Strategy and Kitsap Refugia Report										
		Task: Conduct Assessment <ul style="list-style-type: none">Inventory and characterize subwatersheds (habitat, fish passage, hydrology, land use, etc)Assess ecological function/impairmentIdentify recommended actions to achieve goals and objectivesDevelop tools to evaluate project-level and planning-level cumulative impacts/benefitsIntegrate into 2009 Bainbridge Island Salmon Recovery and Conservation Sub-Area PlanIntegrate as BAS into 2011 Comp Plan, CAO, and SSWM updates	2006-2008	NRT	.5 - 1	Unknown	High	All	All	-	-	
		Task: Update Assessment <ul style="list-style-type: none">Integrate into 2016 Bainbridge Island Salmon Recovery and Conservation Sub-Area Plan updateIntegrate as BAS into 2018 Comp Plan, SMMP, CAO, and SSWM updates	2015		.25	Unknown						
12	AM-3	BI Nearshore Assessment <ul style="list-style-type: none">Inventory and characterization of nearshoreAssesses ecological function/impairmentScientific basis for recommended actions and state-mandated policy & regulation updates related to nearshoreProvides tools to evaluate project-level and planning-level cumulative impacts/benefitsUpdate at least every 7-yearsIntegrate into future updates of East Kitsap Lead Entity Strategy and Kitsap Refugia Report										
		Task: Integrate into 2005-2007 SMMP Update (task 9)	2005-2007	SSP			High	-	-	All	All	
		Task: Update Assessment <ul style="list-style-type: none">Update inventory, characterization, and assessmentIntegrate into 2009 Bainbridge Island Salmon Recovery and Conservation Sub-Area PlanIntegrate as BAS into 2011 Comp Plan, CAO, and SSWM updates	2008		.3	Unknown						
		Task: Update Assessment <ul style="list-style-type: none">Update inventory, characterization, and assessmentIntegrate into 2016 Bainbridge Island Salmon Recovery and	2015		.3	Unknown						

Action ID	Objectives	Description	Status/ Timeframe	Lead ¹	FTE, Cumulative Est. (.1 = 5 wks FT)	Non-staff Cost	Priority	Subwatershed ²	Stream Reach	Shoreline Management Area ³	Nearshore Reach	Fulfills Recommendation of Anther Plan or Legal Mandate
		Conservation Sub-Area Plan update <ul style="list-style-type: none">Integrate as BAS into 2018 Comp Plan, SMMP, CAO, and SSWM updates										
#	AM-2 AM-3	Salmon Population Monitoring <ul style="list-style-type: none">Evaluate and monitor salmon distribution (historical, existing, & potential future extent) and abundance.Work with WDFW, Suquamish Tribe, and watershed council to develop appropriate and efficient methodsReview current beach seining efforts and revise as necessary to further evaluate salmon presence, distribution, and habitat associations/functionsThe best methods for distribution and abundance monitoring are likely spawner counts, snorkeling/electroshocking, & beach seining	Watersheds – Start 2006 Nearshore – Continue	NRT w/ Tribe & WDFW	<.1	Unknown	High	All	Many	All	All	GMA, CAO, SMMP
#	AM-2 AM-3	Forage Fish Surveys <ul style="list-style-type: none">Existing surveys of forage fish spawning beaches were done sporadically and opportunistically, leaving large areas that were not surveyed as well as areas not surveyed over and extended period of timeRecent comprehensive surveys in Jefferson, San Juan, and Island Counties have shown that significant data gaps are highly likely for spawning beach distributionWork with WDFW, the Suquamish Tribe, and the Shoreline Stewardship Program to design and conduct a comprehensive survey of beaches with suitable substrate for forage fish spawning activityIntegrate results into 2008 Nearshore Assessment update (action 12)	2006-2008	SSP w/ Tribe & WDFW	<.1-.2	Minimal: Volunteers	High	-	-	All	Many	GMA, CAO, SMMP
#	AM-2 AM-3	Sea Bed Mapping <ul style="list-style-type: none">Map the distribution and abundance of submerged aquatic vegetation and other speciesMap the distribution of subtidal substrate & bathymetryIntegrate results into 2005-2007 SMMP Update (action 9)Integrate results into 2008 Nearshore Assessment update (action 12)	2006	SSP	<.1-.2	\$50-100,000	High	-	-	All	All	GMA, CAO, SMMP
#	AM-2 AM-3	Drift-Cell Sediment Budget Analysis <ul style="list-style-type: none">Map feeder bluffs, transport, and depositional zonesEstimate a sediment budget for each drift-cell using historic and contemporary informationAssess drift-cell functionIntegrate results into 2005-2007 SMMP Update (action 9)Integrate results into 2008 Nearshore Assessment update (action 12)	2006	SSP	<.1-.2	Unknown	High	-	-	All	All	GMA, CAO, SMMP
13	AM-3	Groundwater Monitoring Program <ul style="list-style-type: none">Relevant to plan as far as relationship with in-stream flowsProgram should integrate with surface water monitoring, as appropriateCould be integrate into 2006-2008 subwatershed assessment	Unknown	PW	?	Unknown	High	All	-	-	-	GMA; CAO; SSWM; Watershed Planning Act; Level-II Basin Assessment;
14	AM-3	Subsurface Geologic Mapping <ul style="list-style-type: none">Underway by UW/USGSRelevant to plan as far as relationship with in-stream flowsIntegrate into 2006-2008 subwatershed assessment	2004-2005	ENG	<.1	??? \$180,000+	High	All	All	All	All	GMA; CAO; SSWM; SMMP; Watershed Planning Act; Level-II Basin Assessment;
15	AM-3	Surface Geologic Mapping (UW/USGS)	2000-2005	ENG	<.1	Unknown	High	All	All	All	All	GMA; CAO; SSWM;


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		<ul style="list-style-type: none">Underway by UW/USGSUseful for identifying unstable slopes (nearshore feeder bluffs, possible risk of sedimentation to streams)Possibly useful for evaluating in-stream flow & interflowIntegrate into 2006-2008 subwatershed assessment										SMMP; Watershed Planning Act; Level-II Basin Assessment;
#	AM-2 AM-3 AM-4	Data Management <ul style="list-style-type: none">Coordinate and maintain on an interdepartmental basisGeoreferenced when ever possibleCompatible and shared with local and state databases	Ongoing	NRT	<.1	Minimal	High	-	-	-	-	
		Community Actions										
2	C-2 C-5 C-6	Salmon Recovery and Conservation Report Addressing the following: <ul style="list-style-type: none">Are proposed actions getting implemented on schedule and within planning cost estimates?Are effectiveness and validation monitoring showing overall improvements or declines?Is the community supportive of efforts?Are there procedural impediments to implementing the plan?Are resources and funding adequate to implement the plan?Are there recommended or needed changes to the plan prior to next iterative update? These could be based on:<ul style="list-style-type: none">New scientific information,Change in funding/resources (+/-),Legal issues  Preferably, this would be integrated into a larger bi-annual stewardship/indicators report for the Island’s ecosystem, community, and economy.	(Bi-annually) 2006 2008 2010 2012 2014 2016 2018	NRT	<.1	Minimal	High					
3	C-5	Community Survey <ul style="list-style-type: none">Measure community awareness and support for salmon recovery and conservation, in part, through the periodic Community Values Survey conducted by COBI.	(At least twice every seven years) 2006 2009 2012 2016	EXEC & NRT	<.1	Unknown	Moderate/High					
4	C-1 C-2 C-5	Annual Stewardship Event <ul style="list-style-type: none">Continue annual shoreline stewardship event and expand to include watershed stewardshipShare stewardship successes/setbacks, discuss trends, build support for next stepsOpportunity for guest speakers, booths, community building, community dialogueCoincide event with the release of the bi-annual report (task 2)	Annual	NRT & WC	<.1	Minimal	Moderate					
5	C-1	Annual Salmon Homecoming event	Annual	WC &	<.1	Unknown	Moderate					

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	C-2 C-5	<ul style="list-style-type: none">Guided community tours of salmon habitat and projectsGuest speakers on relevant current topics		NRT								
		Policy/Regulatory Actions										
6	E-1 - 5 C-3 - 4 C-7	Comprehensive Plan Update <ul style="list-style-type: none">Created Environment Element in 2004Working on indicators – 2005 (don’t know if/how these will relate to salmon recovery yet)	2011 2018	PCD	1.5-2	Unknown	High, Required	All	All	All	All	GMA
7	E-1 - 5 C-3 - 4 C-7	CAO Update <ul style="list-style-type: none">Consistent with mandatory BAS requirement [cite RCW/WAC]Consistent with mandatory special consideration for anadromous fish [cite RCW/WAC]Include non-regulatory components to improve public awareness, provide community assistance, and encourage voluntary stewardship actions	2005 2011 2018	PCD	.75-1	Unknown	High, Required	All	All	All	All	GMA; Salmon Recovery Act
8	E-1 - 5 C-3 - 4 C-7	SSWM Ordinance Update <ul style="list-style-type: none">COBI is NPDES Phase-II cityAdopt 2001 Ecology Manual in 2005Encourage Low Impact Development and other green building techniques	2005 2011 2018	SSWM	.25-.5	Unknown	High, Required	All	All	All	All	GMA; Clean Water Act
9	E-1 - 5 C-3 - 4 C-7	SMMP Update <ul style="list-style-type: none">Consistent with mandatory No net loss [cite RCW/WAC]Consistent with mandatory Shoreline Restoration Planning [WAC 173-26-201(2)(f)], which will include appropriate aspects of this salmon recovery and conservation planUtilize Nearshore Assessment (task 12) as part of technical basisInclude non-regulatory components to improve public awareness, provide community assistance, and encourage voluntary stewardship actions	2005-2007 (Required by 2011); 2018	PCD	1-1.5	Unknown	High, Required	-	-	All	All	SMA; ESA; Salmon Recovery Act
#	E-1 - 5 C-3 C-7	Public Benefit Rating System (Open Space Tax Relief) <ul style="list-style-type: none">Work with Kitsap County to review and revise the existing public benefit rating system, so that it can be reasonably applied to shoreline property and small lots.	2007-2008	PCD	<.1	Minimal	Medium/ High	All	All	All	All	
#	C-8	Habitat, Harvest, & Hatchery Integration <ul style="list-style-type: none">Work with WDFW, the Suquamish Tribe, and others to ensure that local and regional salmon populations are recovered and conserved	Ongoing	NRT	<.1	Unknown	High	All	All	All	All	ESA; Salmon Recovery Act
		Nearshore Habitat Actions										
16	E-1 - 5 C-4 C-6 – 7 AM-1	Shoreline Roads Study <ul style="list-style-type: none">Planning-level evaluation regarding alternative solutions to shoreline roads with chronic erosion, slide, and flooding problems.Study is planned to include: Manitou Beach Rd; Country Club Rd; Rockaway BeachMost of these roads are built on bluffs subject to erosion or fill that has buried intertidal, backshore, and marsh habitat as well as eliminated most, if not all, riparian vegetation.Use BI Nearshore Assessment to evaluate the benefits/impacts of alternative solutions and determine preferred options.	2005	ENG	<.1-2	\$100,000	High	-	-	BH EH MC Possibly: PW-BP RB-PM		

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		<div><div></div><div>This study should give serious evaluation to long-term alternatives to armoring and other practices that would help restore and reduce risks to salmon habitat, such as: realignment/ relocation; reclassification to residential and possibly narrowing or even disconnecting through traffic.</div><div></div><div>Additional shoreline roads that currently or could impact salmon habitat include: Eagle Harbor Drive; Crystal Springs Rd; Moran Rd; and Pt. White Drive. These roads should be integrated into the study or addressed in a similar fashion.</div><div></div><div>Reducing or eliminating habitat impacts from shoreline roads are among the most significant (in both scale & benefit) habitat projects within the Bainbridge Island nearshore.</div><div></div><div>Implementing high-visibility public projects becomes a model and motivator for voluntary projects on private property.</div><div></div><div>Implementing public projects shares burdens and benefits among the community as a whole and allows for potential integration of public amenities, such as non-motorized travel corridors, open space, and shoreline access.</div></div>											
#	#	Moran Rd <div><div></div><div>The northern portion of Moran Rd is unstable and several slides have occurred during the last 2-3 years. This section of road runs parallel to one of the largest and most functional stream mouth subestuaries on the Island. A significant slide could create a complete blockage of the Murden Cove watershed and bury estuarine habitat.</div><div></div><div>The BI Nearshore Assessment currently rates this area as “no impact,” although the road fill was not accounted for and has likely reduced the extent of the floodplain and resulted in some impacts.</div><div></div><div>A geotechnical assessment should be conducted and used to evaluate risks to habitat and human safety.</div><div></div><div>Additional community issues should be evaluated, including traffic connectivity and the functional safety of the nearby intersection with Manitou Beach Rd/SR-305.</div><div></div><div>Action alternatives should minimize the habitat risk while avoiding new long-term impacts.</div></div>						MC	Murden Cove/Grisdale Ck	MC	3171		
#	#	Country Club Rd <div><div></div><div>Realign road away from shoreline, remove bulkheading, and restore riparian vegetation.</div><div></div><div>Integrate public shoreline access and recreation. Could be a good site for a community or public dock.</div><div></div><div>Current BI Nearshore Assessment rating: <div>xx</div> (<div>xx</div>); ranked <div>xx</div> out of 201</div><div></div><div>Estimated post-restoration rating: <div>xx</div> (<div>xx</div>); ranked <div>xx</div> out of 201</div></div>		PW									
#	#	Eagle Harbor Drive <div><div></div><div></div><div>Current BI Nearshore Assessment rating: <div>xx</div> (<div>xx</div>); ranked <div>xx</div> out of 201</div></div>		PW									

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		<ul style="list-style-type: none">Estimated post-restoration rating: xx (xx); ranked xx out of 201										
#	#	Manitou Beach Rd <ul style="list-style-type: none">Current BI Nearshore Assessment rating: xx (xx); ranked xx out of 201Estimated post-restoration rating: xx (xx); ranked xx out of 201		PW								
#	#	Crystal Springs Rd <ul style="list-style-type: none">Realign road away from shoreline where possible, remove bulkheading and fill, nourish beach sediment, and restore riparian vegetation (while maintaining view corridors).Maintain view corridors of existing homes and improve non-motorized facilities along roadway to enhance recreational enjoyment and safety along this popular biking/walking shoreline roadway.Current BI Nearshore Assessment rating: xx (xx); ranked xx out of 201Estimated post-restoration rating: xx (xx); ranked xx out of 201		PW								
#	#	Pt. Monroe Drive - Fringe Marsh Restoration <ul style="list-style-type: none">Fringe marsh in a lagoon like Pt Monroe, is a highly valuable habitat. Significant loss of fringe marsh has occurred in Pt Monroe due to residential and road development.Restore fringe marsh along the edge of Pt. Monroe Drive by removal of excessive road fill, sculpting to appropriate grade, and planting riparian vegetation in the remaining road shoulder.PW has agreed to do this project at the same time they are replacing the existing culvert and resurfacing the existing road surface.	2005	PW		?						
#	#	Strawberry Plant <ul style="list-style-type: none">Remove significant fill and armoring in stream mouth subestuary and intertidalRemove 100 piles, mostly creosote treated wood, and small floatRemove significant portion of large concrete area within the riparian areaRestore stream mouth, intertidal, fringe marsh, and riparian vegetationCurrent BI Nearshore Assessment rating : Mod/High Impact (-0.725) ; ranked 186 out of 201Estimated post-restoration rating: Low Impact (-0.175); ranked 21 out of 201 reachesWith a new dock, the estimated post-restoration rating would be: xx (xx); ranked xx out of 201  The Strawberry Plant was acquired in 2004 for use as a park. Restoration is very compatible with likely park use. Restoration should be integrated into any park planning process.		SSP & BIPD				NEH	Weaver Creek	EH	3140	
#	#	Waterfront Park Shoreline Restoration <ul style="list-style-type: none">Remove bulkhead, & nourish beach sediment. Design may require drift sill, unless boat ramp provides similar function.Current BI Nearshore Assessment rating: xx (xx); ranked xx out of 201Estimated post-restoration rating: xx (xx); ranked xx out of 201										
#	#	Blakely Harbor Park Shoreline Restoration <ul style="list-style-type: none">Scenario 1: Remove low-tide fish passage barrier between jetties										

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		<ul style="list-style-type: none">Current BI Nearshore Assessment rating: xx (xx); ranked xx out of 201Estimated post-restoration rating: xx (xx); ranked xx out of 201Scenario 2: Remove south jetty, remove rip-rap bulkheading near north jetty, remove metal and wood debris on beach and tidelands<ul style="list-style-type: none">Estimated post-restoration rating: xx (xx); ranked xx out of 201Scenario 3: Remove both jetties, remove rip-rap bulkheading near north jetty, remove metal and wood debris on beach and tidelands, restore and enhance marsh habitat<ul style="list-style-type: none">Estimated post-restoration rating: xx (xx); ranked xx out of 201Scenario 4: Remove both jetties, remove concrete powerhouse, remove rip-rap bulkheading near north jetty, remove metal and wood debris on beach and tidelands, restore and enhance marsh habitat<ul style="list-style-type: none">Estimated post-restoration rating: xx (xx); ranked xx out of 201										
#	#	Schel-Chelb Estuary <ul style="list-style-type: none">Restore cattail wetland to brackish marsh, create and enhance wetlands (fresh and brackish) that connect to the existing estuary.Current BI Nearshore Assessment rating: xx (xx); ranked xx out of 201Estimated post-restoration rating: xx (xx); xx out of 201		Owner								
#	#	Abandoned creosote treated piles and drift wood <ul style="list-style-type: none">Remove unused creosote treated piles and drift wood from public lands and voluntary private lands.		SSP	<.1	Unknown: Contractor Disposal						
#	#	Close Property										
		Task: Acquisition & Public Access	In Progress, must complete by 12/2005	BILT	.3 - .6	\$2.5 Million	High	GL	-	PW-BP	3528	
		Task: Property Management <ul style="list-style-type: none">Invasive plant controlMonitor	Ongoing	BILT								
		Manitou Beach Marsh (Kane Open Space Property)		SSP	.1-.2	Unknown	Medium					
		Agate Passage (SMA-1)										
		Port Madison Bay (SMA-2)										
		Rolling Bay – Point Monroe (SMA-3)										
		Murden Cove (SMA-4)										
		Eagle Harbor (SMA-5)										
		Blakely Harbor (SMA-6)										
		Rich Passage (SMA-7)										

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		Point White – Battle Point (SMA-8)										
		Manzanita Bay (SMA-9)										
		Watershed Habitat Actions										
#	#	Road Maintenance Program <ul style="list-style-type: none">Adopted a modified version of the Tri-County Road Maintenance Manual in 2003Street sweeping/vacuuming is probably the most important action for reducing pollutant loads to salmon habitatSpecial procedures for working near sensitive habitats, like streams and wetlands  Should be evaluated for sensitivity along shorelines	ongoing	SSWM		Unknown	High	All	All	All	All	Clean Water Act (NPDES Phase II); ESA; Comp Plan; SMMP
#	#	Street and Stormwater Waste Material (Decant) Facility <ul style="list-style-type: none">Essential facility for treating contaminated road/ditch/catch basin spoilsThe City has been cleaning up the old decant facility, which did not meet current standards and is close to a salmon stream.	Clean up, design, build- 2004-2006 Operations-ongoing	SSWM		Need CIP \$	High					
		Fish Passage Barriers <ul style="list-style-type: none">[list NRT priorities]										
		Minimum In-Stream Flows <ul style="list-style-type: none">										

- 1 – Lead for implementing action:
- NRT – COBI Natural Resource Team (COBI’s interdepartmental natural resource program)

SSP – COBI Shoreline Stewardship Program

PW – COBI Public Works Department

SSWM – COBI Surface and Stormwater Management Program

PCD – COBI Planning & Community Development Department

ENG – COBI Engineering Division

EXEC – Executive Department

LRP – COBI Long-Range Planning Division

Tribe – Suquamish Tribe

WDFW – WA Dept of Fish and Wildlife

- 2 – Subwatersheds (From Kato & Warren 2001)
- AP – Agate Passage

BH – Blakely Harbor
ED – Eagledale
FB – Fletcher Bay
GL – Gazzam Lake
MB – Manzanita Bay
NEH – North Eagle Harbor
PB – Pleasant Beach
PM – Port Madison
S - Sunrise
SB – South Beach

3 – Shoreline Management Areas (From Best 2003; Williams et al 2004)

AP – Agate Passage (SMA-1)
BH – Blakely Harbor (SMA-6)
EH – Eagle Harbor (SMA-5)
MB – Manzanita Bay (SMA-9)
MC – Murden Cove (SMA-4)
PM – Port Madison Bay (SMA-2)
PW-BP – Point White – Battle Point (SMA-8)
RB-PM – Rolling Bay – Point Monroe (SMA-3)
RP – Rich Passage (SMA-7)

Additional items to be integrated into Recommended Management Actions table above.

- Implementation & effectiveness monitoring
 - Habitat, education & outreach, etc
- Groundwater – stream flow impacts

Nearshore Restoration (incomplete)

- In addition to specific projects on public lands and willing private lands, summarize 10-yr restoration & enhancement targets (i.e. % increase, linear feet, square feet, etc) for each shoreline management area based on Nearshore Assessment that will require further effort to recruit willing property owners:
 - Water Quality
 - Septic system & marina surveys & correction assistance
 - Particular emphasis on Eagle Harbor, Fletcher Bay, Port Madison Bay, and lagoons
 - Riparian vegetation restoration & enhancement
 - Bulkhead & Groin removal
 - Prioritizing feeder bluffs and beaches with documented or likely forage fish spawning
 - Prioritize in marsh/lagoon areas where bulkheads are not necessary for erosion protection
 - Bulkhead and groin modification (i.e. pull back, convert to soft-shore, etc)
 - Prioritize where forage fish spawning is documented or likely and some form of stabilization is necessary to protect structures that cannot be moved back
 - Fill removal
 - Prioritize fill removal in marsh/lagoon geomorphic class

Education & Outreach (incomplete)

- Boats & marinas
- Nearshore property owners, particularly:
 - Riparian vegetation
 - Armoring
 - Overwater structures

- Stormwater management
 - Fertilizers & pesticides
- Streamside property owners, particularly:
 - Riparian vegetation
 - Stormwater management
 - Fertilizers & pesticides
- Significantly improve printed and web-based educational and guidance materials

Fish Passage Barriers

- Inventory all fish passage barriers and prioritize corrections by 2007. Work with WDFW, the Suquamish Tribe, and the Mid-Sound Fisheries Enhancement Group. Use WDFW’s Prioritization Index methodology. Fund in 2006.
- Continue with fish passage correction projects planned for 2005-2007:
 - Bergman Rd culvert (N. Fork Manzanita Ck),
 - Peterson Hill Rd culvert (Manzanita Ck), and
 - Fletcher Bay Rd/High School Rd culverts and channel (Springbrook Ck).
- By 2008, when a comprehensive inventory and prioritization of fish passage barriers is complete, refine long-term goals for correcting all fish passage barriers. Until that time, the following interim goals shall guide the City’s level of effort:
 - Correct a minimum of two fish passage barriers per year, up to a local cost share of \$300,000 or another limit as set by the City Council.
 - Correct all barriers that completely block fish passage by 2011.
 - Correct all fish passage barriers by 2020.
- Fully integrate fish passage barrier corrections into planning and prioritization of capital projects (i.e. annual CIP process) by 2008. Begin process by mid-2007 for 2008 budget.
- Avoid creating new fish passage barriers and adversely impacting properly functioning conditions by avoiding construction across fish habitat. When necessary, conservatively design fish habitat crossings (e.g. oversized culverts and bridges or overhead and tunneled utilities).
- Time salmon habitat projects with associated and nearby fish passage barrier correction projects in order to efficiently utilize local funds and maximize the potential to win grants and other external funds.
- Give priority to correcting partial barriers and restoring salmon habitat on streams with salmon populations at risk of extirpation if they will reduce the risk of extirpation.
- Work with WSDOT to inventory, prioritize, and correct fish passage barriers along SR-305. Currently there are three culverts identified as partial barriers to fish passage. SR-305 should be thoroughly inventoried for other fish passage barriers. The City’s responsibilities regarding these fish passage barriers should be determined before the City takes responsibility for SR-305, and if necessary, an agreement should be made between WSDOT and the City regarding the correction of fish passage barriers.

Habitat Conservation

- Coordinate the City’s Open Space Commission with the City’s Natural Resource Team to evaluate potential property acquisitions for benefits to salmon as well as watershed and nearshore ecosystems.
- Where possible, utilize open space funds and property acquisitions to leverage external grant funds to maximize the potential of local funds for habitat conservation and to
- Utilize the Bainbridge Island Nearshore Assessment to prioritize habitat conservation efforts in partnership with the COBI Open Space Commission & BI Land Trust.
 - Prioritize areas that have lower impact and support ecosystem processes (i.e. feeder bluff) or important habitat (i.e. pocket estuary)
 - Prioritize non-conforming lots that could result in unmitigated impacts (i.e. septic, bulkhead, stormwater, etc)
 - Prioritize areas with development pressure
 - Use a reserve fund for opportunistic acquisition in priority areas
 - Attempt to use less-than-fee-title conservation methods before fee-title acquisition