

Appendix M

Prioritization and Ranking Criteria and Prioritization Spreadsheet

STORMWATER PROJECT CRITERIA

Supporting Kirkland Comprehensive Plan Goals:

Goal NE-6: “Protect life and property from the damages of floods and erosion.”

Goal NE-5: “Preserve and enhance the water quality of streams and lakes in Greater Kirkland.”

Goal U-4: “Provide storm water management facilities that preserve and enhance the water quality of streams, lakes, and wetlands and protect life and property from floods and erosion.”

Goal CF-1: “Contribute to the quality of life in Kirkland through the planned provision of public capital facilities and utilities.”

Goal CF-5: “Provide needed public facilities that are within the ability of the City to fund or within the City’s authority to require others to provide.”

The Endangered Species Act:

Chinook salmon has been listed as a Threatened species under the Endangered Species Act (ESA). In the near future, the National Marine Fisheries Service, which enforces ESA, will be issuing a rule defining actions that municipalities and private property owners must take to protect Chinook salmon. Depending on the content of the rule, CIP criteria may need to be refined to further address fish habitat concerns.

The Tri-County Assembly (officials from King Pierce and Snohomish Counties that have gathered to respond to the ESA listing) has recommended the following approach for management and preservation of salmon habitat:

- 1. First, do no harm: Reduce and prevent harm by abandoning, modifying, or mitigating existing programs, projects, and activities.*
- 2. Conservation: Protect key watersheds, landscapes, and habitats by acquisition, regulation or voluntary action.*
- 3. Remediation: Restore, rehabilitate and enhance damaged habitats to complement conservation actions.*
- 4. Research: Fill critical gaps in scientific and institutional information.*

STORMWATER PROJECT CRITERIA

Initial Project Screening:

Does the project conflict with any specific policy provision of the Comprehensive Plan?

Yes: Project eliminated from consideration, list goal _____

No: Project ranked using following criteria

PROJECT VALUES

- **FACILITIES:**

Flooding Frequency	5	
Flooding Impact	10	
Condition Assessment	10	
Accessibility	5	
Subtotal		30

- **ENVIRONMENTAL:**

Water Quality	10	
Fish Habitat	10	
Other Benefits	10	
Subtotal		30

- **FISCAL:**

Coordination/Opportunity funding	10	
Cost/Benefit Index	5	
Maintenance Needs	10	
Subtotal		25

- **Public Support and Plan Consistency:**

Public Support/Opposition	5	
Plan Consistency	10	
Subtotal		15

TOTAL: **100**

FACILITIES

- _____ (5) 1. What is the current flooding frequency?
- None or not applicable
0
Low - once every 5-10 years (>100 year event)
1
Medium - once every 2 years (>25-100 year event) 3
High - 3-4 times per year (> 10 year event) 5
- _____ (10) 2. What is the current flooding impact in terms of injury, private property or public infrastructure?
- None 0
Minimal (minor road ponding, flooding of landscaping, other inconveniences)
3
Moderate (impact to crawl spaces, extended road flooding) 6
Extreme (large area impacted with personal injury or heavy property damage) 10
- _____ (10) 3. What are the conditions of the existing facility? **Chose either constructed facility OR natural environment.**
- Constructed Facility
No constructed system involved
0
Existing infrastructure (pipes, manholes, catch basins, retaining walls) are in excellent state
3 Infrastructure is in fair condition, minor defects have been observed 5
Infrastructure is in disrepair; needs constant maintenance to insure ongoing usage. Structural failure. 10
- Natural Environment
No natural system involved 0
Minor degradation (bank erosion, downcutting, sediment deposition, etc.) 3
5
Moderate threat of bank undercutting
Extreme degradation (structures threatened, undermining of banks, severe downcutting) 10
- _____ (5) 4. How accessible is the existing facility for maintenance crews?
- Satisfactory access; personnel and equipment may access from existing public road or right of way or N/A
0
Marginal access (set-up time greater than one hour) 1

Limited access (inspection only) 3
 No access possible for maintenance or inspection 5

 (30 max)

ENVIRONMENTAL

____ (10) 1. What is the proposed project’s ability to improve existing water quality or protect/improve natural hydrology?

N/A 0
 Low (minimal improvement, degradation may continue) 3
 Medium (maintains beneficial use, slight improvement) 6
 High (significant improvement) 10

____ (10) 2. How will the proposed project impact fish habitat restoration/preservation or potential fish productivity in terms of habitat, stream connectivity or stream/lake characteristics? Does the project comply with the intent of the Endangered Species Act listing of Chinook salmon as a threatened species?

N/A (Not a fish habitat project) 0
 Small Improvement 3
 Moderate improvement 5
 Significant improvement or Protects Existing 10

____ (10) 4.. To what degree does the proposed project provide other benefits including education, recreation, open space, wildlife habitat and community livability?

Does not include any other benefits 0
 Conflicts with one of the above existing community amenities minus 5
 Includes other benefits but of lesser value to the community, including at least one of the benefits listed above 5
 Includes benefits of substantial value to the community including at least two of the above 10

(30 max)

FISCAL

_____ (10) 1. What is the possibility for coordination/opportunity funding with other projects? Would it be possible to add fish habitat features to this project?

N/A - No link to other projects, non-City funds are not available to perform improvement 0

Low development activity or potential to integrate with other projects, outside funds not probable 3

Links indirectly with other programs or projects; moderate chance of leveraging other funding 6

Link directly with other project(s) or programs, compounding their effectiveness or certain to leverage substantial amounts (percentage-wise) of other funding habitat will be lost if project not done soon 10

_____ (5) 2. Is the cost/benefit index low or high for this project?

$$\frac{\text{Ranking from all except this}}{\text{Cost of Project}} \times 100 = \text{Cost Benefit Index}$$

N/A (grant funding) 0

0-10 1

10-20 3

> 20 5

_____ (10) 3. How will the conceptual design of the project affect existing maintenance needs?

Greater than existing 0

Same as existing 5

Less than existing 10

 (25 max)

Public Support and Plan Consistency

- _____ (5) 1. Have citizens within the area effected by the project expressed interest and acceptance of the project?
- | | |
|---------------------------------|---|
| Public has expressed opposition | 0 |
| Public reaction is mixed | 1 |
| Moderate public support | 3 |
| Strong public support | 5 |
-
- _____ (10) 2. Is the project identified by the 20 year project list in the Capital Facilities Element of Kirkland’s Comprehensive Plan, or the Stormwater Master Plan?
- | | |
|--|----|
| Project is not in either plan | 0 |
| Project is identified as priority ** in the Surface Water Master Plan | 5 |
| Project is in the Comprehensive Plan, and is listed as priority ** in the Surface Water Master Plan, or is part of the City’s ESA response | 10 |
- _____ (15 max)

SUMMARY

FACILITIES	_____	(30)
ENVIRONMENTAL	_____	(30)
FISCAL	_____	(25)
PUBLIC INVOLVEMENT	_____	(15)
TOTAL PROJECT POINTS	=====	(100)

ID	Project	Preliminary Cost	Criteria											Total Score	Primary Goal Served	Comments	
			Facilities				Environment			Fiscal			Public Support and Plan Consistency				
			Flood frequency	Flood impact	Condition Assessment	Accessibility	Water quality	Fish Habitat	Other Benefits	Coordination/Opportunity funding Cost/Benefit Index	Maintenance Needs	Public Support/Opposition	Plan Consistency				
CA-1	Erosion control measures	\$550	1	3	5	3	6	3	5	3	1	10	1	5	46	Water Quality	City vault in Lk WA Blvd and private vault/pond at Carillon point fill up with sediment from this area
CDE-01	Culvert replacement to improve fish passage	\$615	0	0	5	1	6	5	10	10	1	10	5	10	63	Habitat	Build in coordination with Juanita Drive improvements

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CH-01	Undersized pipe to be replaced	\$219	3	6	10	3	0	0	0	0	3	10	3	5	43	Infrastructure	private property floods, system inaccessible for maintenance
CH-02	Channel reconstruction	\$690	0	0	10	3	6	10	5	3	1	5	5	5	53	Habitat	In Juanita Woodlands Park - strong community support
CH-03	Rain garden and bioretention retrofit	\$85	0	0	10	3	10	5	5	3	5	0	5	5	51	Water Quality	Strong FHNA support for LID/rain gardens

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CH-04	Groundwater seepage and road stability	\$126	5	3	5	0	0	0	0	10	5	10	3	5	46	Infrastructure	Construct as part of Juanita Drive improvements - ice causes safety issue in winter
CJC-9	Culvert replacement to improve fish passage	\$613	0	0	3	3	0	10	5	0	1	5	5	5	37	Habitat	
CW-INF-01	Pipe repair and replacement	\$769	1	0	10	0	0	0	0	10	1	10	3	5	40	Infrastructure	Consider combining with green infrastructure retrofits to increase priority?

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CW-INF-02	Pipe repair and replacement	\$3,025	1	3	10	0	0	0	0	10	1	10	3	5	43	Infrastructure	
DE-01	Sediment removal in channel	\$136	5	6	10	1	3	0	5	0	5	10	3	5	53	Flooding	
EC-01	Everest Creek Ravine Stabilization	\$830															
EC-02	Everest Park Channel and riparian restoration	\$1,096	0	0	5	1	6	3	5	3	1	10	3	5	42	Habitat	Do following or at same time as EC-01 Ravine stabilization

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FO-08	Forbes Creek/BNSF Fish Passage Improvements	\$424	0	0	10	0	3	10	10	10	3	5	3	5	59	Habitat	Coordinate with CKC trail construction
FO-01	Fish passage	\$333	3	3	3	0	3	5	5	6	1	5	3	5	42	Habitat	
FO-02	Regional detention in Forbes Creek basin	\$10,000	1	6	5	0	6	3	5	10	1	5	3	10	55	Flooding	
FO-05	Culvert Replacement	\$1,058	0	0	10	3	3	10	0	3	1	5	3	5	43	Habitat	KC Wastewater should pay for some or all of this project

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FO-07	Channel grade control	\$165	0	0	5	1	6	10	5	6	3	5	3	5	49	Water Quality	Construct AFTER flows are better controlled by FO-02
FO-13	Pilot LID project associated with planned transportation project	\$65	0	0	10	1	6	0	5	0	5	5	5	5	42	Water Quality	
HAS-01	Pipe replacement, improved hydraulics	\$2,369	3	3	5	0	0	0	0	0	1	10	3	5	30	Infrastructure	
JC-01	Sediment removal	\$194	3	6	5	3	6	0	0	0	3	10	1	5	42	Water Quality	

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JC-02	Infrastructure/conveyance	\$874	0	0	10	0	0	0	0	0	1	10	3	5	29	Infrastructure	
JC-03	Juanita Creek floodplain creation	\$533	0	0	3	0	6	3	5	0	1	5	3	5	31	Habitat	
JC-04	Flow diversion	\$266	3	3	3	1	0	0	0	6	1	5	3	5	30	Flooding	
JC-05	Replace culvert and headwall	\$765	0	0	10	0	6	5	0	0	1	10	3	5	40	Infrastructure	
JC-06	Goat Hill Project 1 - SE flooding problem	\$521	3	3	5	1	6	0	0	0	1	10	3	5	37	Flooding	

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JC-07	Goat Hill Project 2 - stabilize eroding channel	\$299	1	3	10	3	6	0	0	0	3	10	3	5	44	Flooding	
JC-08	Goat Hill Project 3 - increase conveyance capacity	\$490	1	3	10	0	3	0	0	0	5	10	3	5	40	Flooding	
MB-01	Replace stormwater pipes	\$680	0	0	10	0	0	0	0	6	1	10	3	5	35	Infrastructure	
RED-01	Underground Injection Control Well (infiltration facility)	\$65	5	6	5	1	0	0	0	0	5	10	3	5	40	Flooding	