

**Table 2 - Evaluation of Potential Actions to Address Watershed Issue A
Flooding of Properties on Hall Creek and Lake Ballinger**

Actions to Address Causes		Generalized Action	Alt. No.	Potential Action	Option Evaluation Criteria*			Total Score	Review Alternative Further?
Time Frame	Action Type				Effectiveness (flow or water quality)	Cost/Benefit	Ability to Implement		
Short Term/1-3 Years	Capital	Infrastructure Management, Retrofit or Upgrade	A-ST1	Flood-proofing — wet or dry floodproofing. (Private funding.)	5	4	2	11	Yes
				Culvert replacement	1	1	4	6	No
		Low Impact Development (LID) Best Management Retrofits (to enhance infiltration and evapotranspiration)		LID BMP retrofits by Residences	1	1	4	6	No
				LID BMP retrofits by Businesses	1	1	4	6	No
	Operational	Public Education	A-ST2	Flood-proofing education	1	2	5	8	Yes
				Education Program: What every citizen can do to help (examples: plant trees, reduce use of fertilizer, etc.)	1	2	2	5	No
		Maintenance	A-ST3	Coordinated hot spot checking & prioritized cleaning of stormwater facilities	1	5	5	11	Yes
		Public Involvement	A-ST4	Volunteer Groups: For public education; spot checks; coordination and collaboration	1	5	3	9	Yes
		Regulation or Code Changes: Flow Control		Require more stringent flow control regulations for all development/redevelopment.	1	2	3	6	No
				Require Low Impact Development - Implement common mandatory LID codes and regulations in all jurisdictions.	1	3	4	8	No
Medium Term/4-6 Years	Capital	Infrastructure Management, Retrofit or Upgrade		Commercial property flow control retrofits	1	2	1	4	No
			A-MT1 A-MT2	Construct new regional stormwater detention and/or infiltration facilities upstream of Lake Ballinger. (Outside SR 99 and I-5 corridors.) Note: Regional Detention alternatives will consider constructed wetland, open pond and buried vault options.	2	3	3	8	Yes
		Large Capital Improvements: Regional Retention/Detention		Enlarge/retrofit existing flow control systems upstream of Lake Ballinger including Chase Lake, Echo Lake and Hall Lake.	1	2	1	4	No
	Operational	Regulation or Code Changes: Reforestation		Street improvements with green street approach to residential, commercial, development, and public roadway improvements.	1	1	2	4	No
				Require reforestation and tree planting tree/vegetation retention for both new development and redevelopment.	1	2	3	6	No
Long Term/Greater Than 6 Years	Capital	Large Capital Improvements	A-LT1	Flood-proofing — elevate structure, relocate structure, floodwall or levee. (Private funding.)	5	4	1	10	Yes
				SR 99 flow control and infiltration retrofit upstream of Lake Ballinger	3	3	2	8	Yes
				I-5 corridor detention/infiltration retrofit upstream of Lake Ballinger	3	3	2	8	Yes
		Capital Improvement	A-LT5	High flow bypass system from Lake Ballinger to Lake Washington	5	2	2	9	Yes
				Modification/Dredging of Lake Basin to increase lake storage and peak flow storage/detention.	3	1	1	5	No
				High flow bypass system from Lake Ballinger to regional detention downstream within McAler Basin.	3	2	2	7	No
	Operational	Low Impact Development Best Management Retrofits (to enhance infiltration and evapotranspiration)		Transfer of water (peak flows) by pumping to adjacent watershed for discharge to Puget Sound or Lake Washington	3	2	1	6	No
				Long-term commitment and program to design and build LID BMPs to retrofit existing infrastructure.	1	2	3	6	No
		Develop Lake Level Management Plan	A-LT6	Lower storage, modify weir and manage lake as a large regional detention facility; also establish new seasonal lake levels.	4	5	1	10	Yes
		Property Buy-Out	A-LT2	Buyout flood-prone properties around Lake Ballinger and other properties within the flooding prone/problem areas.	5	4	2	11	Yes

Evaluation Criteria

*See Project Selection and Evaluation Process Memorandum dated January 13, 2009, for a description of what is included in each of these three Option Evaluation Criterion. These tables will be referred to as part of the Tech Memo #2.

Responsibilities:

The action options are not necessarily the sole responsibility of the member jurisdictions. Due to the large amount of private property contribution to the identified flow and water quality issues, some actions can only be taken by private land owners or with a public/private partnership.

Scoring:

5= High
4 = Medium-High
3 = Medium
2 = Medium Low
1 = Low
15 = Maximum Total Score