



Western Washington University  
**Western CEDAR**

---

Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference  
(Seattle, Wash.)

---

Apr 4th, 4:30 PM - 4:45 PM

## Constructing a multi-jurisdictional watershed-scale stormwater and habitat recovery plan for Bear Creek

Jeff Burkey

King County DNRP, United States, jeff.burkey@kingcounty.gov

Timothy Clark

King County DNRP, United States, timothy.clark@kingcounty.gov

Follow this and additional works at: <https://cedar.wwu.edu/ssec>



Part of the [Fresh Water Studies Commons](#), [Marine Biology Commons](#), [Natural Resources and Conservation Commons](#), and the [Terrestrial and Aquatic Ecology Commons](#)

---

Burkey, Jeff and Clark, Timothy, "Constructing a multi-jurisdictional watershed-scale stormwater and habitat recovery plan for Bear Creek" (2018). *Salish Sea Ecosystem Conference*. 109.  
<https://cedar.wwu.edu/ssec/2018ssec/allsessions/109>

This Event is brought to you for free and open access by the Conferences and Events at Western CEDAR. It has been accepted for inclusion in Salish Sea Ecosystem Conference by an authorized administrator of Western CEDAR. For more information, please contact [westerncedar@wwu.edu](mailto:westerncedar@wwu.edu).

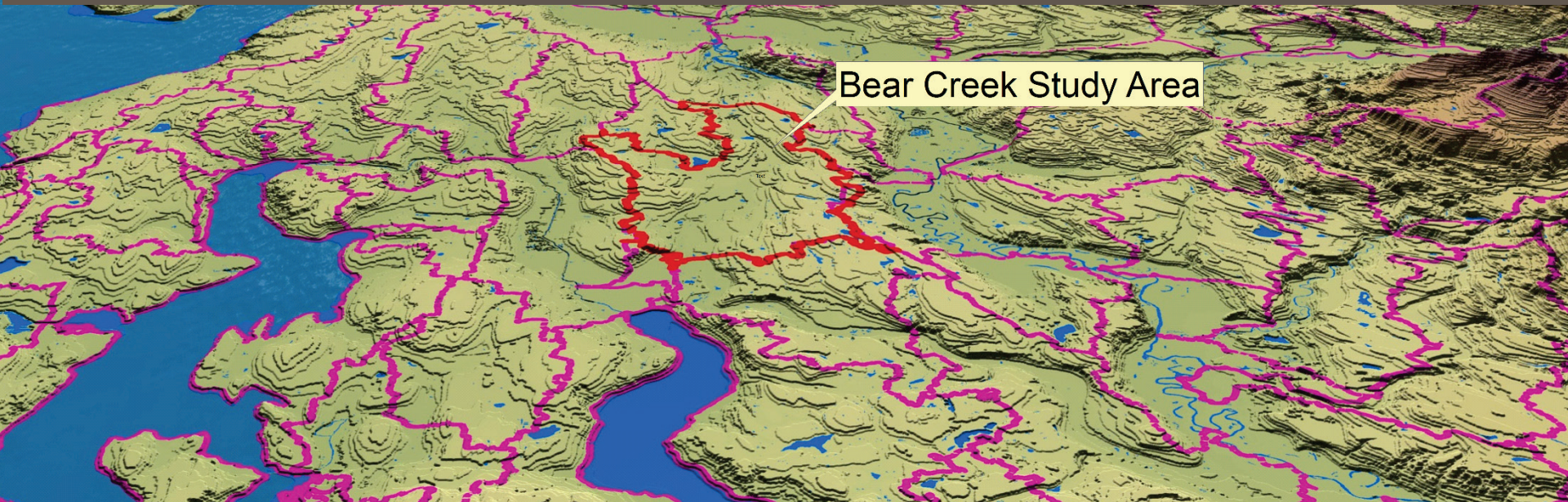
# Watershed-Scale Stormwater Management Planning

## Lessons Learned

Jeff Burkey  
King County,  
Department of Natural  
Resources and Parks

**Stormwater** is considered the most significant source of pollutants to our receiving waterbodies!

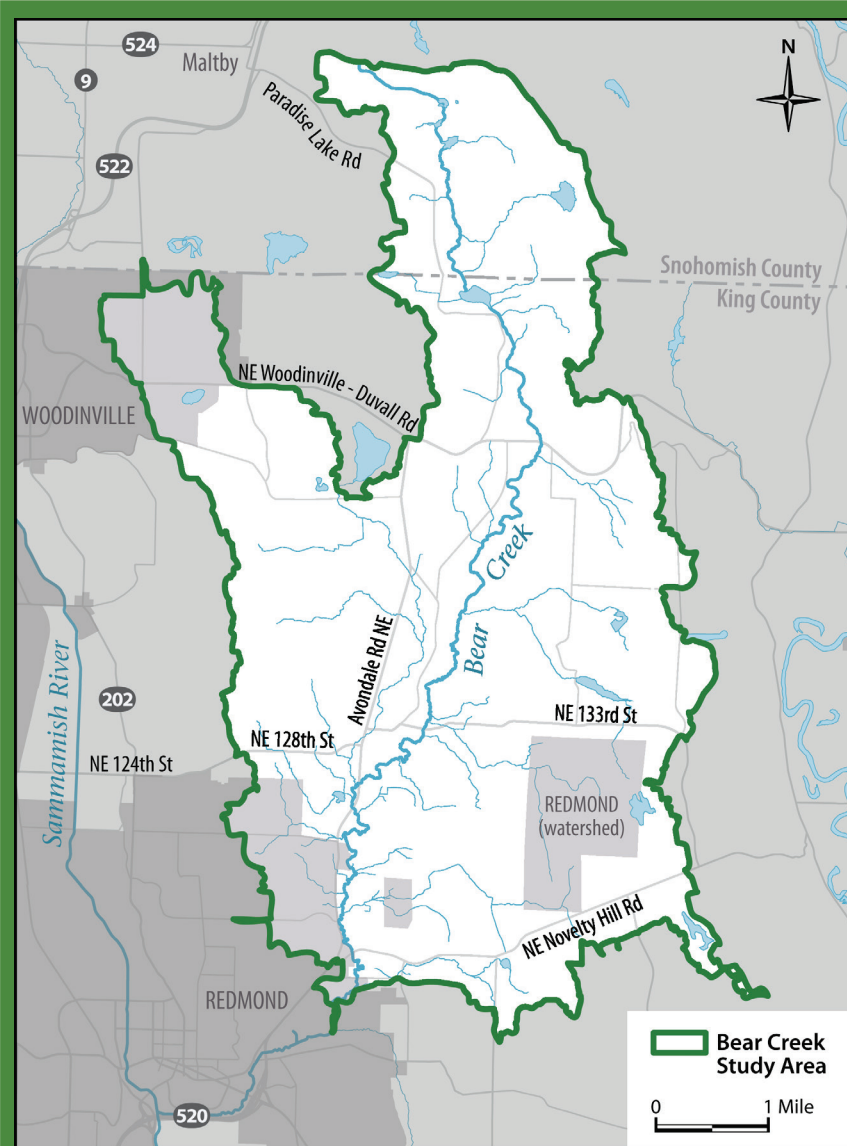
# Bear Creek Watershed Management Study



A Stormwater Permit Requirement

# Crossing Jurisdictional Boundaries

- Inter Local Agreements
- Scope of Work
- Coordination Plan



King County



Snohomish County



City of Redmond  
WASHINGTON

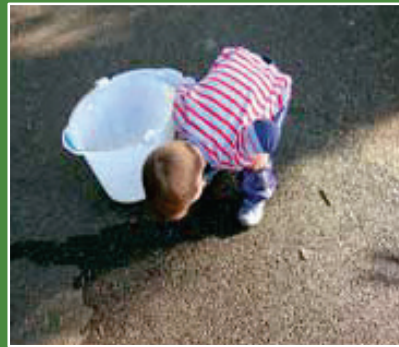


The City of  
WOODINVILLE  
1910



WSDOT

# Collaborate with the Public



# Choosing a Stormwater Strategy



% of Health Achieved



Cost

HSPF +  
SUSTAIN =  
187 models



# Prioritize Stormwater



+

# Prioritize Habitat



# = Watershed Approach

Number of Unit BMPs

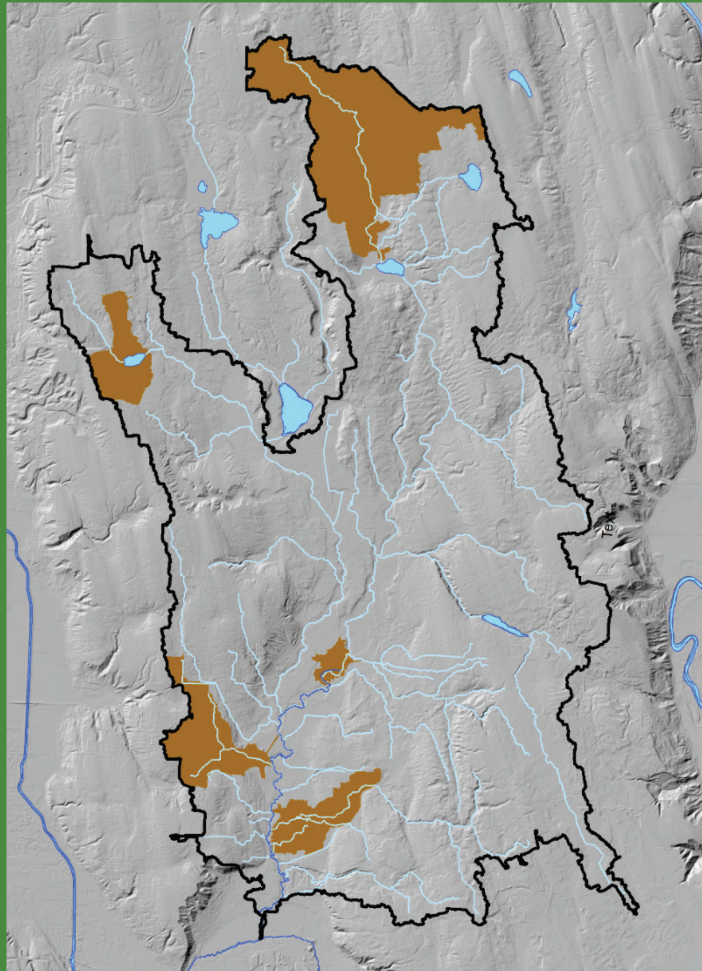
Catchment	Bioretention				Cistern	Permeable Pavement	Gravity Well	Stormwater Ponds		
	Parcels (OW)	Right-of-Way (OW)	Parcels (Till)	Right-of-way (Till)				Infiltration	Dry+ Wet	Wet
BEA010	411	114	0	0	63	17	7	3	0	0
BEA020	21	20	0	0	2	2	1	1	0	0
BEA030	177	52	75	43	19	27	16	7	3	0
BEA040	38	1	87	71	20	11	14	7	3	0
BEA050	32	154	25	118	18	33	27	0	1	0
BEA060	341	284	87	48	28	97	8	10	1	0
BEA070	224	5	12	0	5	1	5	1	0	0
BEA080	37	14	14	6	0	8	3	0	7	0
BEA100	309	28	44	35	17	37	3	0	3	0
BEA110	3	1	0	0	4	0	28	0	0	0
BEA120	425	51	74	15	10	29	6	4	7	0
BEA130	155	41	55	57	10	19	10	1	0	0
BEA140	66	14	155	33	9	16	11	4	5	0
BEA150	76	15	57	18	9	11	7	2	3	0
BEA160	22	15	17	22	3	3	1	0	1	0
BEA170	3	1	113	99	21	38	12	7	1	0
BEA180	32	0	43	11	15	10	5	3	1	0
BEA190	70	93	684	47	117	122	25	0	10	0
BEA200	136	200	226	68	53	149	7	13	17	0

\$1,500,000,000

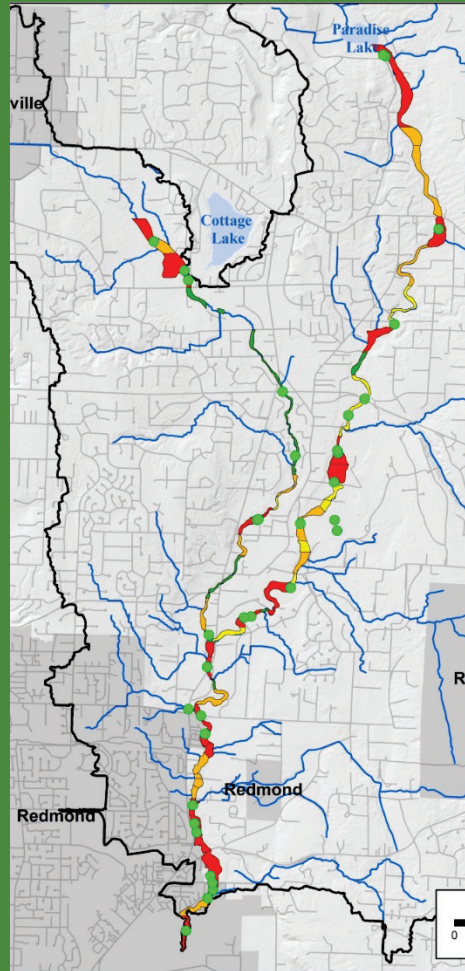


# Prioritization & Coordination of Actions (10 years, \$82M)

## Stormwater



## Habitat



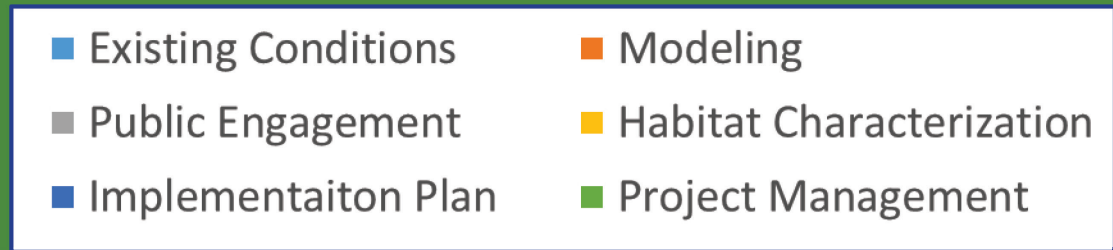
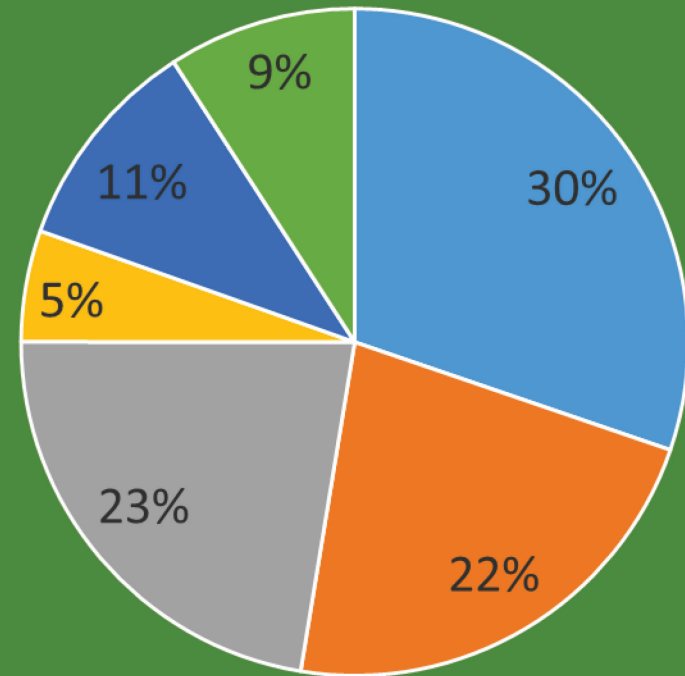
## Complementary Efforts

- Land Conservation
- Stormwater Services
- Road Services
- WRIA 8 Salmon Recovery Plan
- Monticello Creek
- WS DOT Permit

# Lessons Learned

- 4 Years is tight
- Stormwater is only part of the problem
- Develop Coordination Plan
- Agree on method of Cost sharing
- Engage Public Early and often
- Triple Modeling Time
- Prioritize Restoration Actions
- Start small

# Project Expenditures (\$1.75M)



# We Submitted Yesterday One day early!



{visualize}  
Me dropping the mic!



Questions?

<http://www.KingCounty.gov/BearCreekStudy>



King County

Acknowledgements