# Miller and Walker Creek Basins

Public Meeting October 2, 2003

### Miller, Walker, and Salmon Creek Basin Planning Project Miller and Walker Creek Public Meeting

October 2, 2003 6:30 PM - 8:00 PM Washington State Criminal Justice Training Center 19010 1st Avenue South Burien, WA 98148

#### **AGENDA**

6:30	Open House – Viewing of display boards and maps
7:00	Presentation – Overview of planning process, work done to date, basin problems identified, and potential solutions
7:40	Question and Answer Session
8:00	Conclusion – Opportunities for further comment and involvement

#### **Project Management Team**

#### **City of Burien**

Steve Clark Dan Bath

#### **City of SeaTac**

Dale Schroeder

#### **Port of Seattle**

**Bob Duffner** 

#### **King County**

**Curt Crawford** 

#### **City of Normandy Park**

Steve Bennett Roger Kuykendall

### **Washington State Department of Transportation (WSDOT)**

Mehrdad Moini

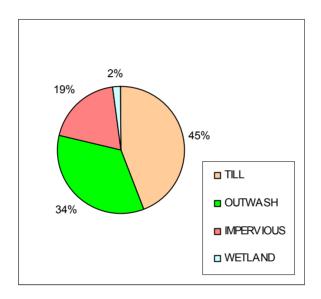
#### Basin planning goal:

Management strategy, including regulations, programs, and capital projects to protect and enhance the Miller, Walker, and Salmon Creek basins.

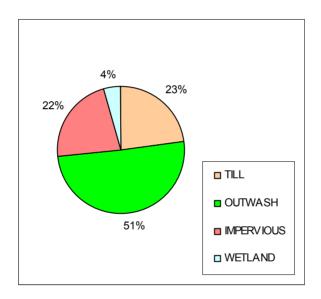
- -Past studies
- -Field visits
- -Hydrologic modeling
- -Public comments

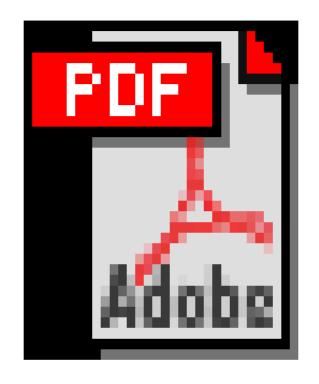
	Miller Creek	Walker Creek
Size (acres) Population	4370 25,000	914 4,700
Similarities:	Three regions – upland, ravine, delta	
Differences:	More till More commercial Less ground water	More outwash Mostly residential More ground water

#### Miller Creek Current Land Cover

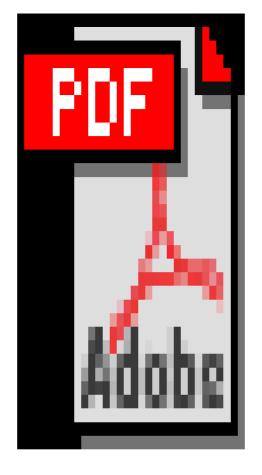


#### Walker Creek Current Land Cover





# MillerbasinMAP.pdf



# kerbasinMAP.



Miller Creek looking south along SR 509 at S. 136th St.



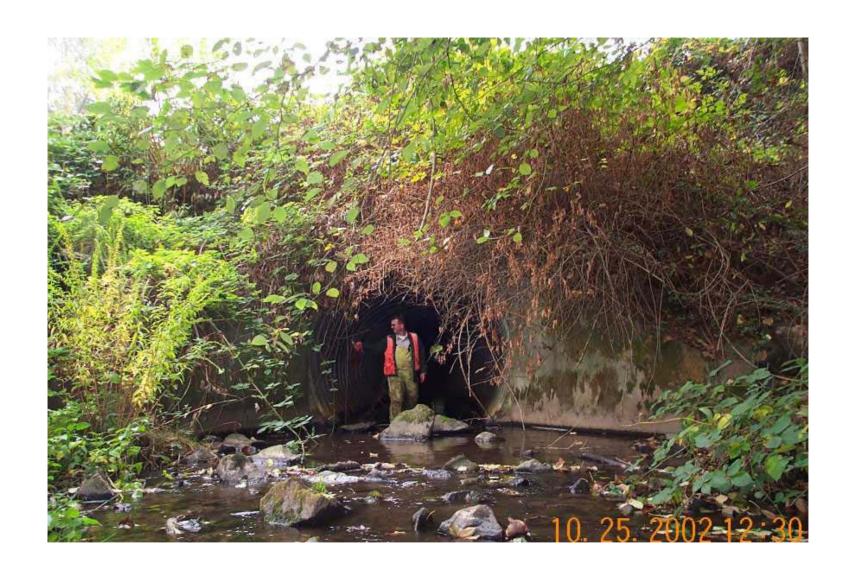
Miller Creek in upper watershed



Miller Creek on Port property – waterfall area



Miller Creek in ravine



Miller Creek culvert at 1st Av S



Ambaum Regional Detention Pond



Miller Creek at mouth



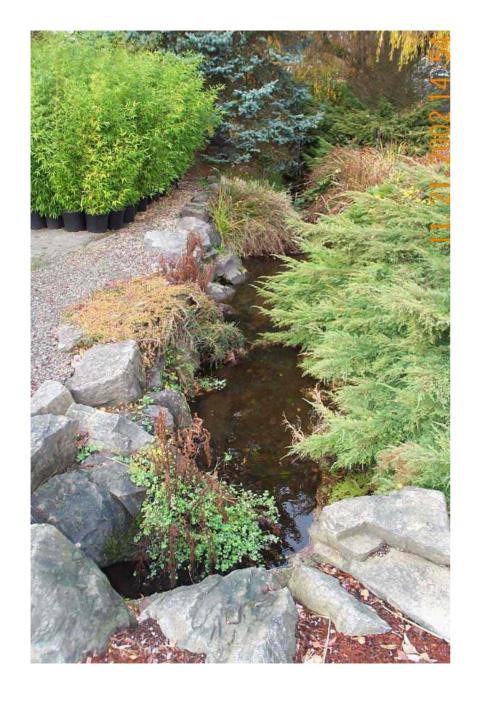
Miller/Walker shoreline



Walker Creek outflow from headwater wetland along Des Moines Memorial Drive



Broken retaining wall along Des Moines Memorial Drive



Walker Creek in upper watershed



Walker Creek in upper watershed



Walker Creek in ravine



Walker Creek in ravine



Walker/Sequoia confluence at 13th Av SW



Walker Creek at Community Club

#### Miller and Walker Creek Goals:

- Increase fish usage
- Improve water quality in the basin
- Control flooding and hazardous erosion in the stream and throughout the basin

#### Miller and Walker Creek Goal:

Increase fish usage

### Miller and Walker Creek Fish Usage Problems Identified:

- sitings of several hundred coho, chum and cutthroat/year – potential number of returning adults is roughly 12,000 fish/year under pristine conditions
- lack of estuary and near-shore habitat
- lack of channel complexity in some areas
- possible fish passage barriers at culverts under 1<sup>st</sup> Ave. S
- Miller possible fish passage barrier at Miller Creek Regional Detention Pond
- Walker potential threats to large wetlands at the headwaters of the stream

# Miller and Walker Creek Fish Usage Problems Identified (con't):

- Miller -- current peak flows and flow durations are too high for good habitat to be established – lack of finer materials in stream bed precludes insect communities and spawning gravels
- FAA has general guidance discouraging large areas of open water near the airport that might attract birds to the flight path
- pre-spawn mortality in coho

# Miller and Walker Creek Fish Usage Potential Mitigation:

- create an estuary and near-shore habitat
- increase channel complexity
- Miller install baffles in the 1st Av S culvert
- Walker replace culvert at 1<sup>st</sup> Av S (Normandy Park doing this)
- Miller modify Miller Creek Regional Detention Pond to provide fish passage
- Miller reduce peak flows and flow durations to encourage formation of good habitat (more)

# Miller and Walker Creek Fish Usage Potential Mitigation (con't):

- Miller add gravel to stream to improve habitat
- Walker protect large headwater wetlands
- add riparian zone plantings
- require application of low-impact development measures that improve hydrology
- involve citizens in habitat restoration projects
- develop community education and stream stewardship programs

# Miller and Walker Creek Fish Usage Potential Mitigation (con't):

- maintain city-owned riparian property as undeveloped open space
- purchase undeveloped riparian properties from willing sellers for habitat restoration, as opportunities arise over time

### Miller and Walker Creek Fish Usage Implementation Challenges:

- estuary property is filled but not extensively developed; privately owned
- limited benefit to other habitat projects without estuary
- some property owners may not wish to participate in habitat restoration
- limited funding and access for improvements to habitat

# Miller and Walker Creek Fish Usage Implementation Challenges (con't):

- limited funding for acquisitions
- Miller reducing peak flows and durations will be costly and there is limited funding and space to construct public flow control facilities
- minimizing bird hazard to aircraft from increased fish usage

#### Miller and Walker Creek Goal:

Improve water quality in the basin

### Miller and Walker Creek Water Quality Problems Identified:

- historic data indicate levels of metals, especially zinc and copper, are high throughout basins
- areas of particularly high metals concentrations are Ambaum Regional Detention Facility and SR 518 in Miller Creek and along SR 509 in both Miller and Walker Creeks
- limited amount of recent water quality data
- lack of water quality treatment in basin

## Miller and Walker Creek Water Quality Potential Mitigation:

- collect additional water quality data to verify hot spots and to set baselines against which to measure treatment effectiveness
- increase water quality treatment requirements for future development
- Miller retrofit Ambaum Regional Detention Facility to increase water quality treatment
- Miller retrofit Hermes Depression to increase water quality treatment

(more)

# Miller and Walker Creek Water Quality Potential Mitigation (con't):

- retrofit highway drainage systems to provide water quality treatment
- retrofit existing developed areas with water quality treatment
- require application of low-impact development measures that improve water quality

# Miller and Walker Creek Water Quality Potential Mitigation (con't):

- develop community education programs to work on source control to reduce pollutant loadings to stream
- purchase undeveloped properties from willing sellers for water quality treatment, as opportunities arise over time
- improve current programs for identifying and enforcing water quality violations
- improve current programs for inspecting and maintaining treatment facilities

39

### Miller and Walker Creek Water Quality Implementation Challenges:

- need to balance water quality improvements with flood protection potential of facilities
- diffuse and varied pollutant sources, difficult to implement treatment and prevention of pollution
- limited funding for treatment improvements

#### Miller and Walker Creek Goal:

 Control flooding and hazardous erosion in the stream and throughout the basin

### Miller and Walker Creek Flooding and Hazardous Erosion Problems Identified:

- some small-scale localized flooding
- Miller past flooding adjacent to Hermes Depression (apparently related to pump system failures)
- Walker road culvert plugging from sediment accumulation at mouth

### Miller and Walker Creek Flooding and Hazardous Erosion Potential Mitigation:

- reduce flows or implement flood-proofing measures to address small-scale localized flooding
- Miller develop operations and maintenance plan for Hermes Depression pumping system to reduce flooding hazards, and potentially providing more effective storage (for flooding and/or water quality)

# Miller and Walker Creek Flooding and Hazardous Erosion Potential Mitigation (con't):

- reduce flows to reduce erosion and transport of sediment
- Walker increase culvert capacity to allow for normal sediment accumulation
- continue current programs for inspecting and maintaining flow control and conveyance facilities
- policy issue of regional vs. local problems, solutions, and funding
- limited funding to address problems

#### Next steps:

Consider your comments
Complete technical work
Prepare draft basin plan
More public review
Finalize basin plan
More public review
Approval by project partners
Agreements for funding