

Regional Approaches to Water Rights Mitigation

ARWA-WA Conference

September 2013

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Olympia's Transition to New Water Source



McAllister Springs



McAllister Wellfield

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Why New Water Source?

- Replace McAllister Springs with a more protected source of supply
 - Surface water influence
 - Railway spill risk
 - Sea level rise
- Supply benefit



McAllister Springs

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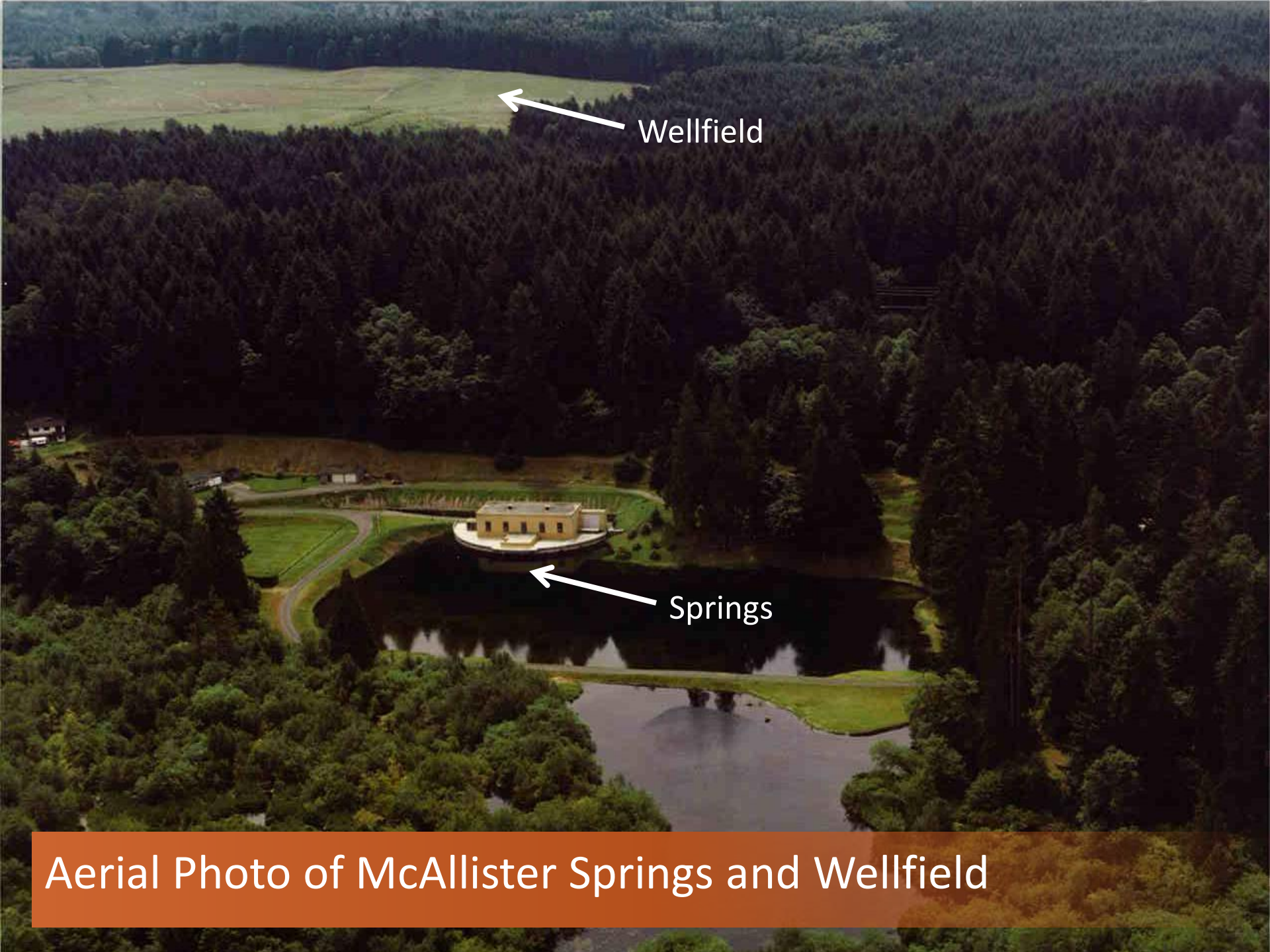
17 Years In the Works

- Applied for water right change in 1995
- Significant investment in groundwater study and model
- Challenging mitigation needs – way more complicated than originally thought



McAllister Wellfield Property

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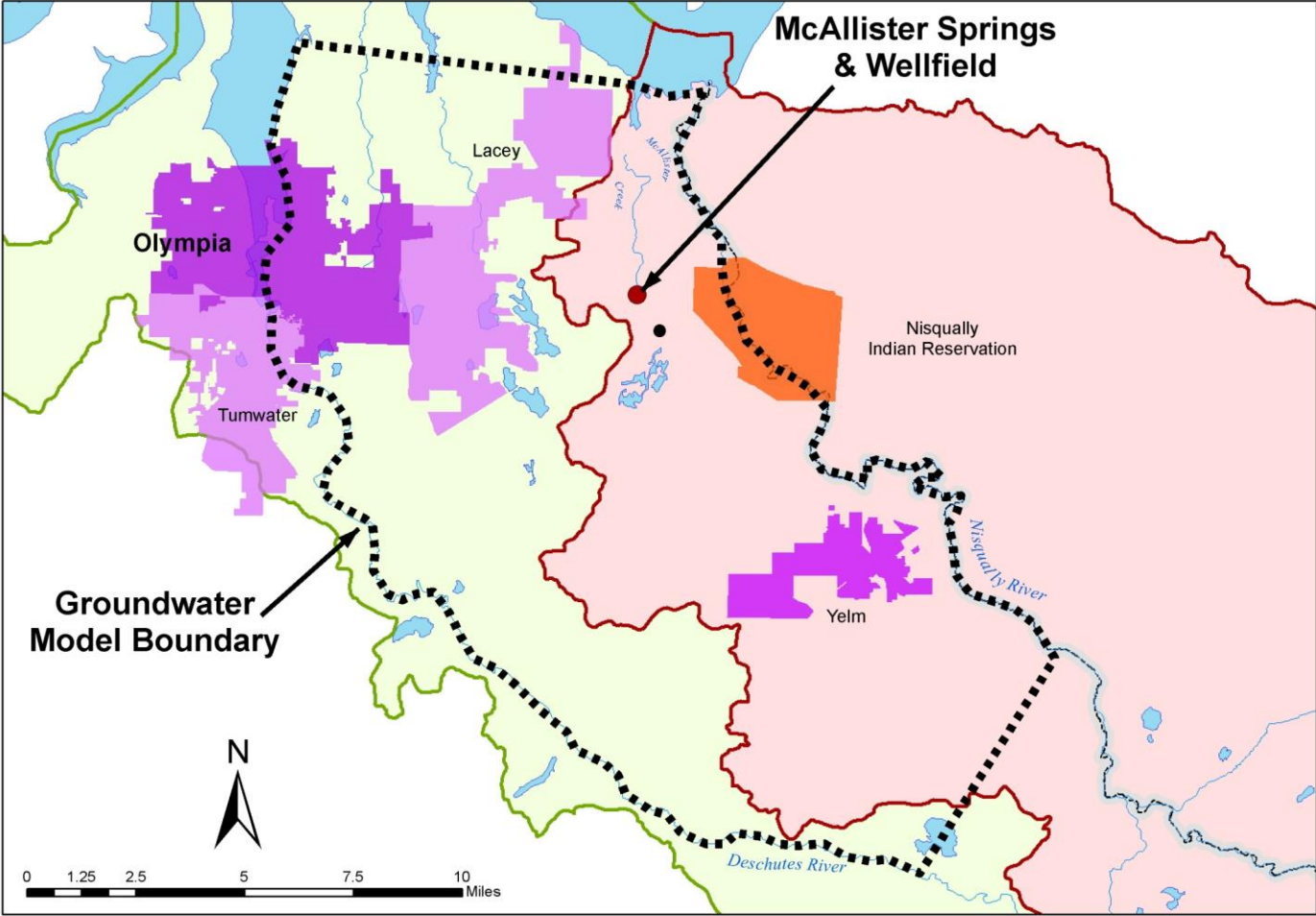


Wellfield

Springs

Aerial Photo of McAllister Springs and Wellfield

Groundwater Modeling



“Houston, we have a problem.”

Water Body	Maximum Depletion (cfs)	% of Groundwater Flow	Peak Month
Nisqually River	7.21	6.4%	July
Deschutes River	0.37	0.3%	February
Tri-Lakes	0.23	1.5%	March
Lake St. Clair	0.12	0.8%	July-Aug
Woodland Creek	0.03	0.3%	Dec-Mar



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A Fork In The Road

- Local municipalities simultaneously pursuing water rights in basin
 - Olympia
 - Lacey
 - Yelm
- Tribes expressing concern
- Regional coordination or go it alone?



Deschutes River

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Regional Approach?

PROS

- Ecology push for regional solutions
- Tribes preference to engage regionally
- Coordinated modeling avoids “competing” versions
- More cost effective
- More robust and sustainable mitigation

CONS

- State only makes decisions on individual applications
- More parties to coordinate – slows things down
- Decision making is more challenging
- Difficulty when interests diverge
- Can generate more opposition

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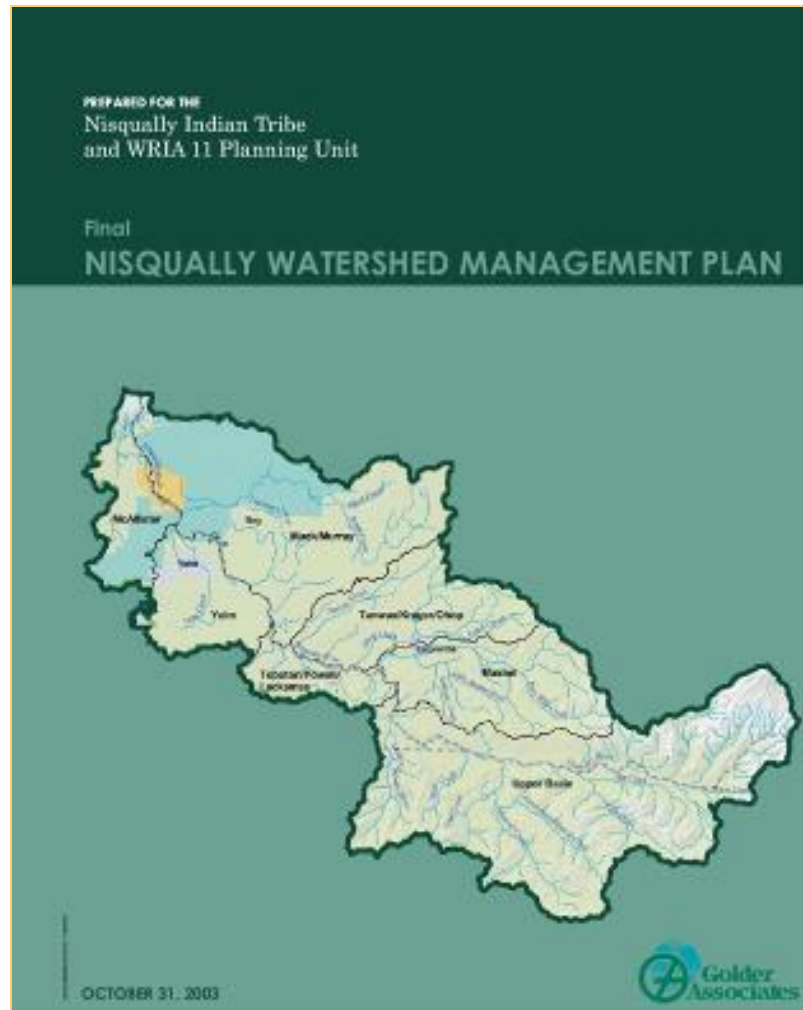
Guiding Principles from City Council

- Take long-term 50-year view
- Provide safe and reliable water supply for future while protecting in-stream flows and aquifers
- Use limited water supplies efficiently
- Take collaborative, regional approach to water resources management



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Nisqually Watershed Plan



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Historic Partnership Olympia and Nisqually Tribe

- Joint Wellfield
- Shared mitigation
- Permanent protection of McAllister Springs
- Nisqually Stewardship Coalition



**Mayor Mah and Chairman
Iyall Sign Historic Agreement**

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Regional Collaboration Olympia, Lacey and Yelm

- Coordinated modeling
- Joint mitigation
- Shared benefit of Wellfield to McAllister Creek
- Joint negotiations with Ecology and Tribes



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Regional Mitigation Across 2 Basins

- Nisqually Basin
 - Nisqually River (Nisqually Tribe, Lacey and Yelm)
 - McAllister Creek (Lacey and Yelm)
 - Lake St. Clair (Olympia)
- Deschutes Basin
 - Tri-Lakes (Olympia and Lacey)*
 - Woodland Creek (Olympia and Lacey)*
 - Deschutes River (Olympia, Lacey and Yelm)



McAllister Creek

*Yelm also involved to a very minor extent

Nisqually River Mitigation

- “No Drill Zone” on Nisqually Reservation
- Habitat Restoration
- Dam Releases (Tacoma Power)



**Alder Dam – Nisqually
River**

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Lake St. Clair Mitigation

- Purchase and retirement of upstream water right



Lake St. Clair



Woodland Creek/Tri-Lakes Mitigation

- Focus entire mitigation on impaired Woodland Creek to improve conditions
 - Regional reclaimed water infiltration facility
 - Purchase of land and stream buffers
- Impact to lakes challenging to even measure



Woodland Creek

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Deschutes River Mitigation

Irrigation Period – In-Kind

- Purchase and retirement of two irrigation water rights in upper reach

Non-Irrigation Period – Out-of-Kind

- Large riparian land purchase and habitat restoration



Deschutes River

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Sheep Farm to Grow Salmon

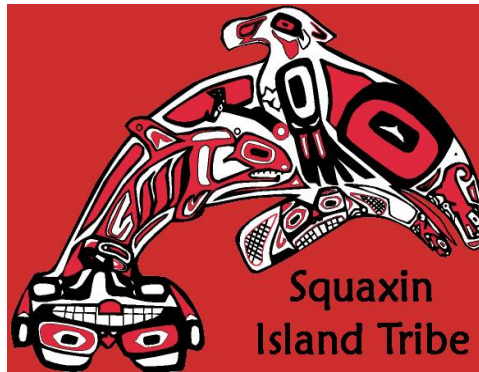


- Sensitive upper Deschutes Basin
- 200 acre farmland
- Over a mile of river frontage
- Large spring and side channel
- Wetland restoration
- Water quality improvement

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Budd Inlet/Deschutes River Habitat Restoration Coalition

A Commitment to Restoration



Restoration Coalition MOU

- Habitat restoration fund of \$500K
- Funding used as match for larger habitat restoration projects.
- Strategic Plan for long term restoration priorities within the Watershed.
- Potential for other parties to join in the mission of this coalition.



Deschutes River

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Water Right Approval

- January 2012 - final approved water right change presented to Olympia City Council
 - Fully transfers McAllister Springs and nearby Abbot Springs water rights
 - Allows phased development over next 40 years for both City and Tribe
 - No appeals
- Significant package of new water rights also approved for City of Lacey and City of Yelm*

*Appeal still pending regarding Yelm's water rights



Officials Breaking Ground at the McAllister Wellfield



Drilling new 24-inch well at McAllister Wellfield



McAllister Wellfield Pipeline - Connecting at Springs



Conceptual Design – McAllister Wellfield

Thank You



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