

Overview of New Water Supply Opportunities and Challenges

AWWA Pre-Conference Session

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The Way We Were....



The Way We Are....



Drivers – The “easy” water is gone

- Surface Water Not Available
- Declining Ground Water Levels
- Conjunctive Management of GW/SW
- Listed Fish Species
- Peak flows
- Fish Passage
- Water Quality
- Use of Undeveloped Permits

Common PNW Challenges

- Complex regulatory processes – state and federal
- Multiple on-ramps for public participation
- A big price tag – public support is needed
- Questions about the need
- Regionalization and cooperation

Water Supply Alternatives

Opportunities

- Off-Channel Storage – winter water
- Increasing storage of an existing project
- ASR – use of existing water right

Challenges

- Peak flows; high cost of storage projects; geography.
- Governance; inundation; regulatory processes; cost.
- Cost; regulatory processes, proper hydrogeologic setting; instream flows; water quality.

Water Supply Alternatives

Opportunities

- Conservation – doing more with less
- Reuse – doing more with “waste”
- Marketing – redistributing existing supply

Challenges

- Quantification; unintended consequences; revenue impacts.
- Public acceptance; unintended consequences; cost; regulatory processes.
- Regulatory processes; matching sellers and buyers; authorization to market.

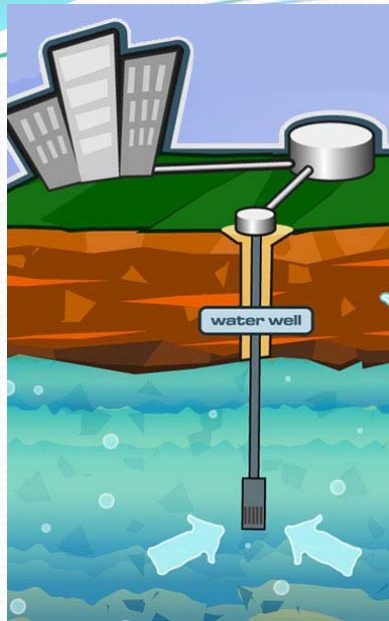
Water Supply Alternatives

Opportunities

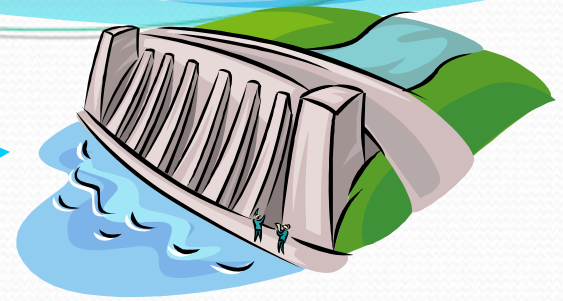
- Mitigation – offsetting impacts
- Regionalization – working towards a common goal
- Protect and maximize what you have!

Challenges

- Availability; black box.
- Being self-less; governance.
- Changing regulatory landscape; constant management – not hit and run.



Groundwater



Surface Storage

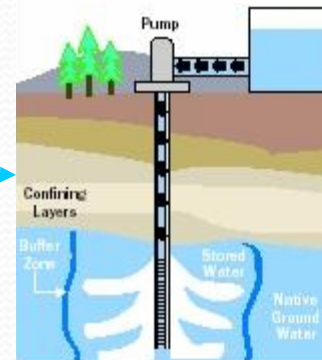


Surface Water

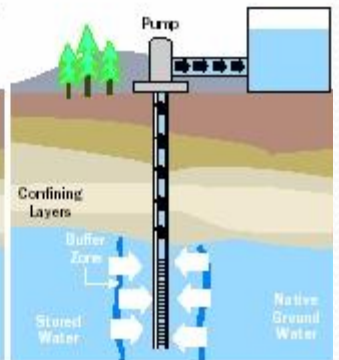


Conservation

Injection



Recovery



Aquifer Storage and Recovery

Rules To Live By....

- Be Strategic
- Be Cooperative
- Be Creative
- Be Diligent

Have Fun!

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