Knowledge Development and Transfer – Sustainable Documentation

AMERICAN WATER WORKS ASSOCIATION

PACIFIC NORTHWEST SECTION ANNUAL CONFERENCE

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WATER
OUR FOCUS
OUR BUSINESS
OUR PASSION

Skagit PUD
PUBLIC UTILITY DISTRICT

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Engineers...Working Wonders With Water®

Who is in the room today?

- Utility Managers
- Utility Operations and Maintenance Staff
- Utility Engineers
- Consultants
- Equipment Vendors

The silver tsunami is upon us

How do we transfer the institutional knowledge of leaders who have operated our plants for decades?

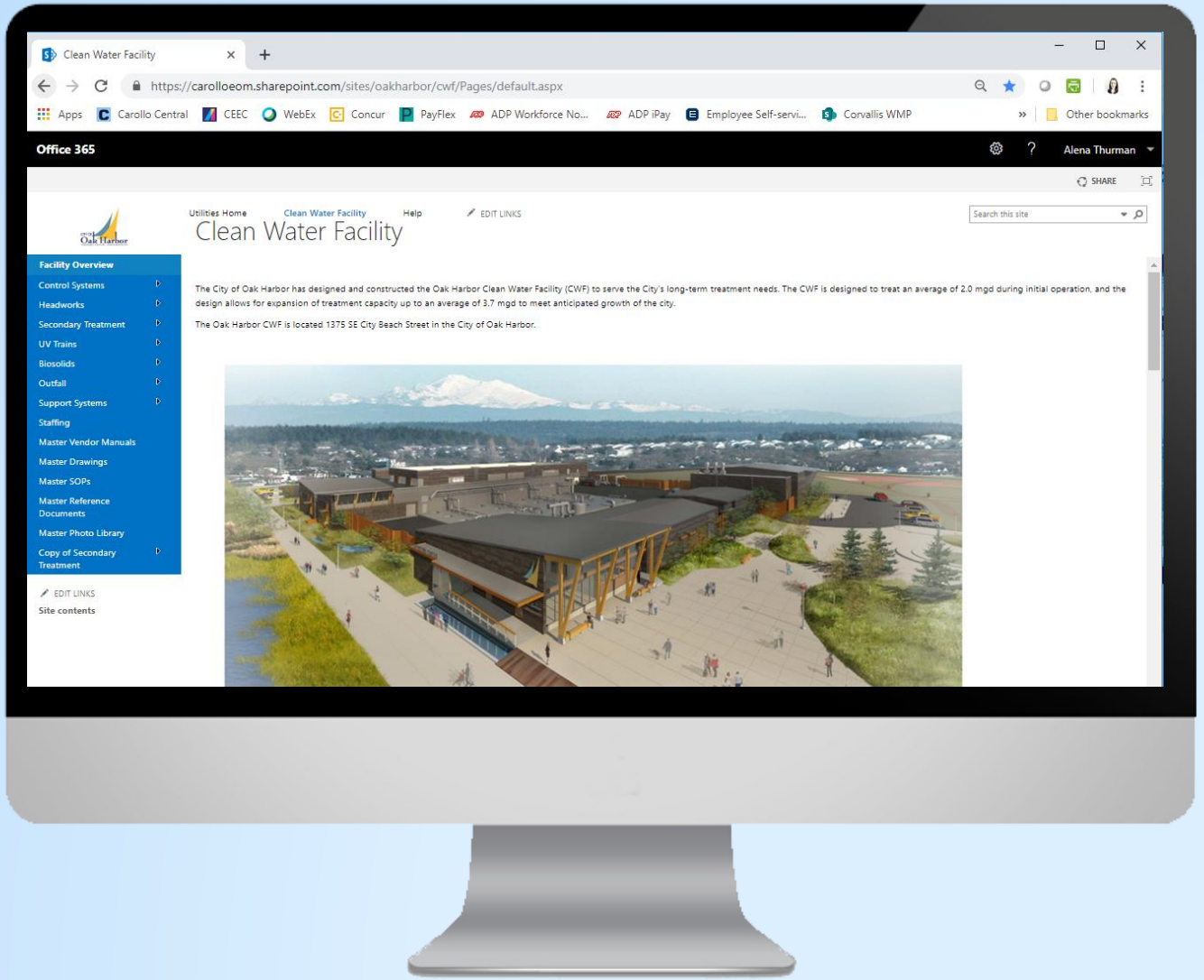
The younger work force expects digital learning tools

- Visual learners
- Don’t know life without the internet
- Want mobile devices

Our utilities need digital tools to facilitate knowledge transfer and training

Electronic Operations Manuals (EOMs) offer information that is:

- All in one place (past versions too)
- Organized
- Online and accessible from anywhere
- Visual
- Searchable
- Secure



Operators aren’t the only users

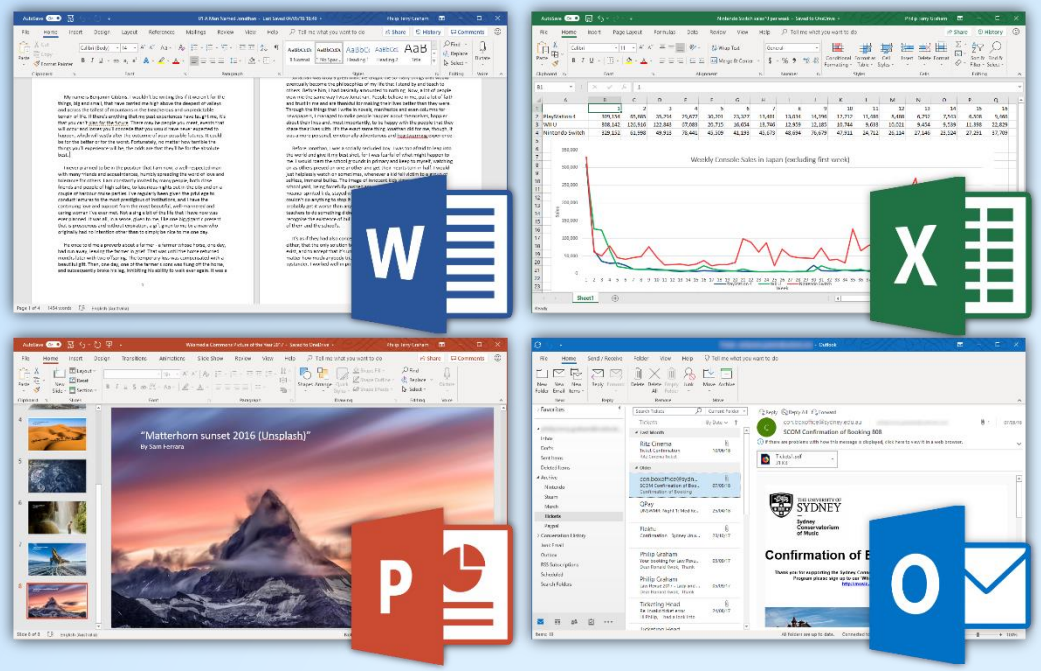
EOMs Benefit:

- Operators
- Maintenance staff
- Utility engineers
- Managers
- Board/Council members
- Contractors & consultants
- Public

How do you make documentation sustainable?

Empower users to keep it up-to-date.

- Make it easy to use and edit
  - Create content in familiar and accessible programs
- Use an industry standard platform
  - Longevity: will be maintained by the developer
  - Customer support.
- Hosted on utility's server



SharePoint

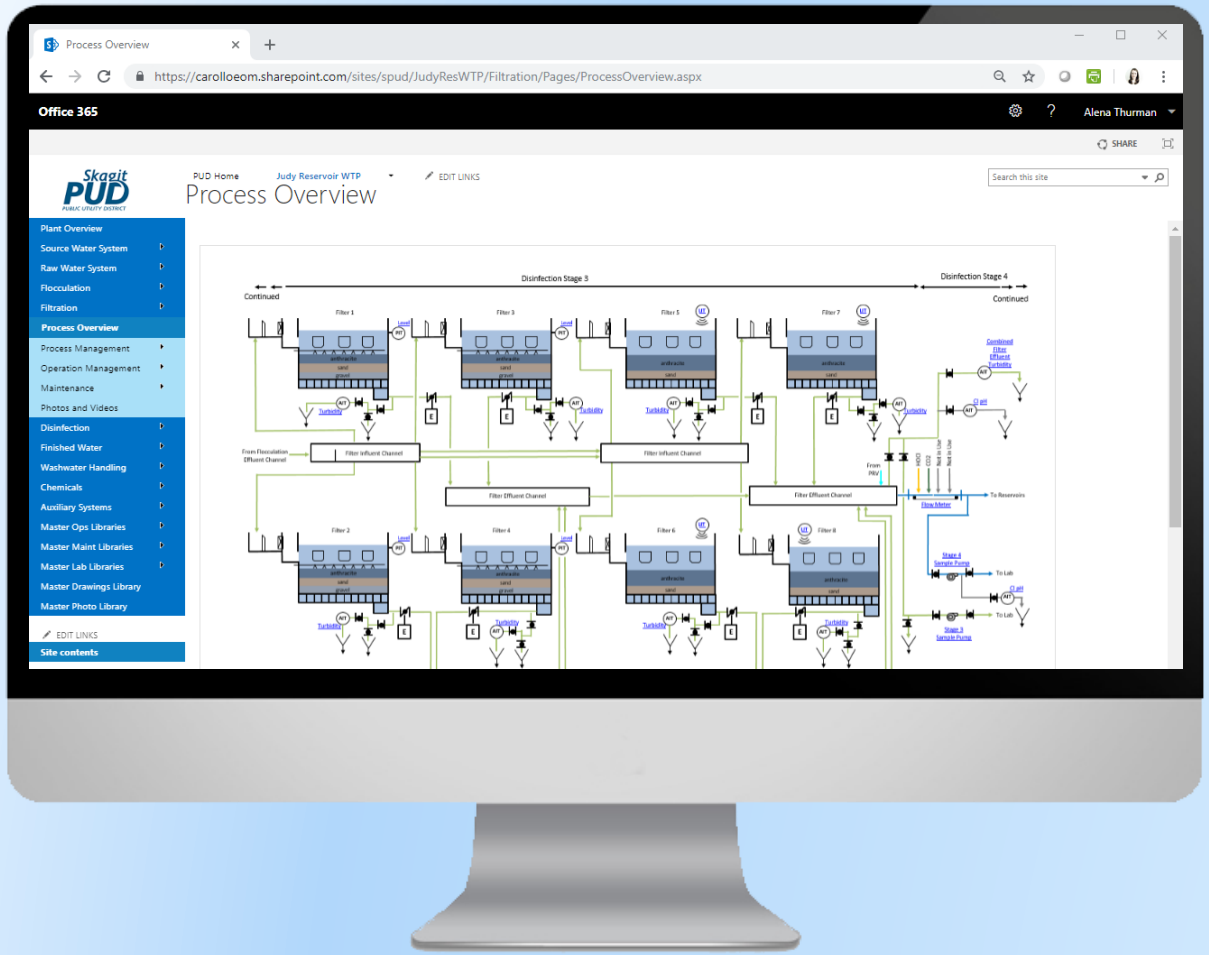
Why did Skagit PUD choose to develop an EOM for Judy Reservoir WTP?

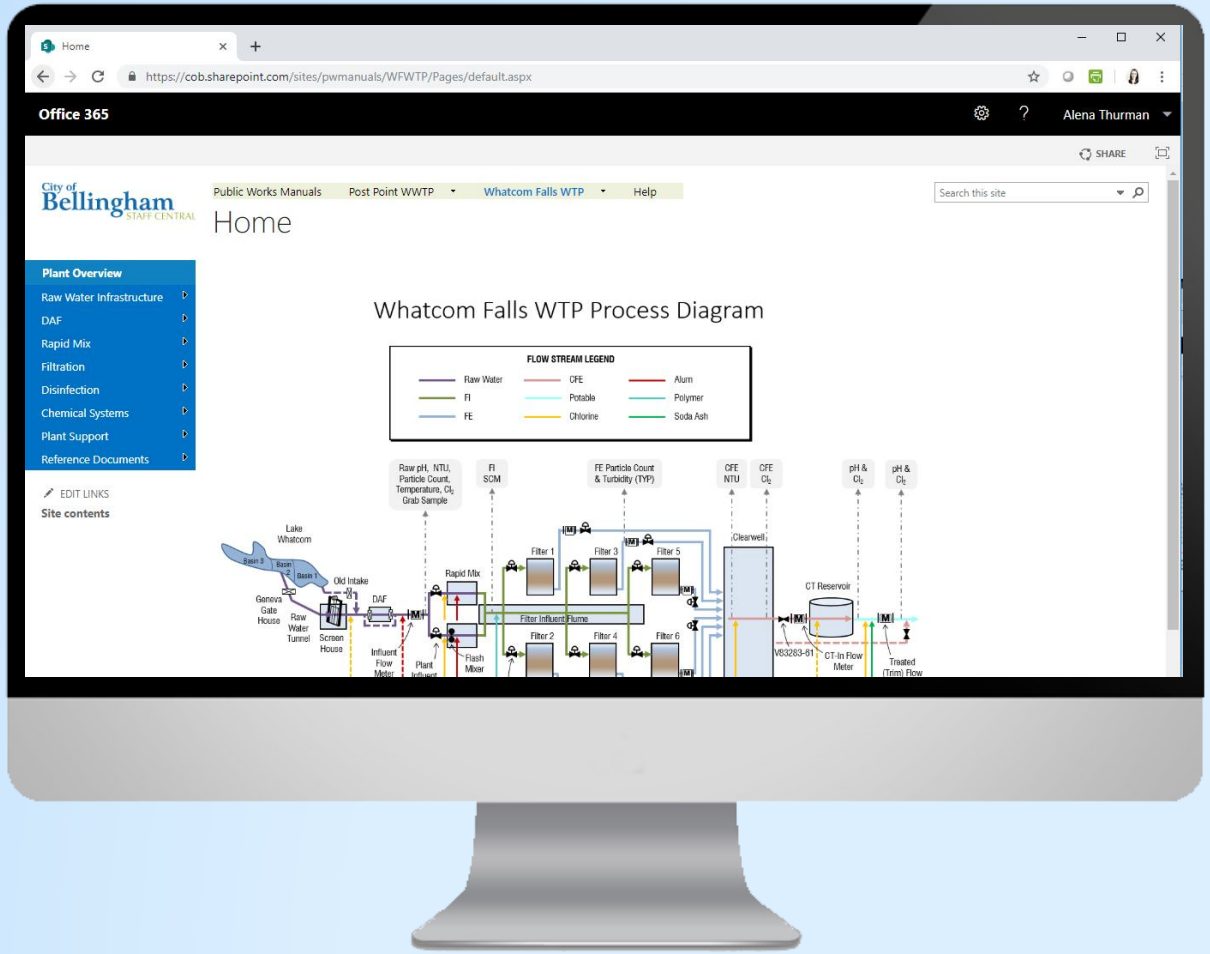
- Washington Department of Health required a new manual to be developed.
- Several modifications made to Judy Reservoir WTP since original construction in 1990.
- Wanted to integrate the various operations manuals into one cohesive resource.
- Needed to correct outdated information.

Why did Bellingham choose to develop an EOM for Whatcom Falls WTP?

- Motivated by retirement of key staff.
- Wanted to organize and modernize their document management

What does an EOM look like?

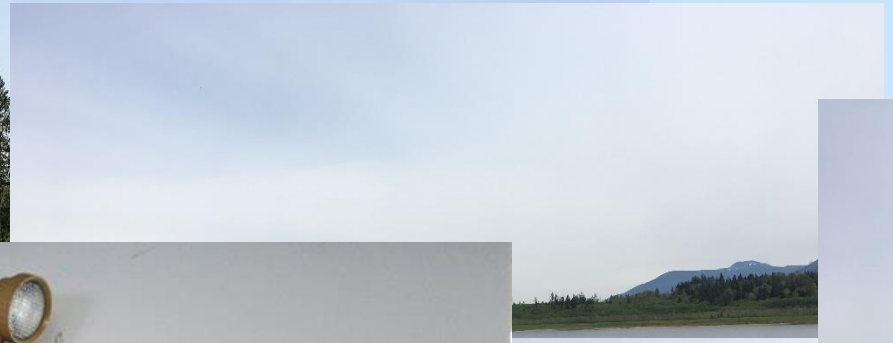




How do you develop an EOM?

- It takes plant staff commitment
- Start by determining EOM framework
- Plant staff provide existing documentation to consultant
- Information gathering site visits for each process
- Consultant develops content
- Plant staff review

Questions?



Judy Reservoir

Skagit
PUD
PUBLIC UTILITY DISTRICT
History of
Judy Reservoir
1936
Public Utility District No. 1 of Skagit County formed by voters.
1940
Skagit PUD purchases water system from Clear Lake Water Corporation, including Cultus Mountain diversions of Gilligan, Salmon and Turner Creeks.
1947
Construction of Judy Reservoir completed.
Storage Capacity:
450 million gallons
1965
Judy Reservoir dam elevations increased.
Storage Capacity:
1.01 billion gallons
Spillway Elevation: 451'
1980
Construction of existing Gilligan Creek intake pipeline.
New Judy Reservoir Water Treatment Plant construction completed.
1996
Skagit PUD enters into a landmark agreement with other agencies and Indian tribes that secures District's water rights for 50 years.
2001
Skagit River Instream Flow Rule established.
Judy Reservoir dam elevation raised.
Storage Capacity:
1.45 billion gallons
Spillway Elevation: 465.1'
2007
Construction begins at Skagit River Diversion Pump Station.
2010
Skagit River Diversion Pump Station begins supplying water to Judy Reservoir.
Water Treatment Plant upgraded to allow for peak capacity of 30 million gallons per day.
L. B. Judy
First General Manager
Public Utility District No. 1 of
Skagit County

Judy Reservoir