

UNION REGIONAL WATER SYSTEMS CONSOLIDATION PLAN COMMISSIONERS WORKSHOP

JUNE 2017



INVOLVED WATER SYSTEMS

- UNION
- UNION RIDGE
- VUECREST
- HIGHLAND PARK
- HOOD CANAL
- ALDERBROOK

Letter Grade of Individual Systems

➤ UNION	"D"
➤ UNION RIDGE	"C"
➤ VUECREST	"C"
➤ HIGHLAND PARK	"C"
➤ HOOD CANAL	"D"
➤ ALDERBROOK	"F"

Based on the \$ amount needed to bring systems up in reliability and service Based on Gray and Osborne's study

CONSOLIDATION REGIONALIZATION

CON'S

- It's a dirty word
- Losing Autonomy
- Losing Ownership
- Bringing outsiders in
- "Us" vs "Them"

PRO'S

- System Reliability
- Service Area Control
- Leveraging of Funds
- Equal Stake
- Better Access to Safe Drinking Water
- Dispersed Cost Due to Increased Future Regulations

WHY WOULD IT BE IMPORTANT TO MOVE FORWARD

Individual Water Systems vs Regional System

➤ Individual water system

- Increasing pressure to meet stringent drinking water requirements.
- Continued raising costs to maintain infrastructure;
 - I. Result lower reliability. (pump @ union)
 - II. Infrastructure needs vs Fed and State resources widened
 - III. EPA 2001 study to develop small systems \$3,500/service vs large \$750/service
 - IV. End of useful life and the demand for new services
- Water System Plan is required at 10 yr intervals cost \$30K to \$45K per WS (180-270K) total as individuals
- Less likely to be able to leverage funds for individual small systems

WHY WOULD IT BE IMPORTANT TO MOVE FORWARD

Individual Water Systems vs Regional System

➤ Regional Water System

- Easier to meet stringent Drinking Water Requirements more robust RWS and it has redundancy
- Contained cost lowered to maintain infrastructure.
 - I. Costs shared by all.
 - II. Able to limit the gap between Fed and State Resources.
 - III. Control area of service reduce environmental impact.
 - IV. Infrastructure improvements able to meet demands for growth and new services.
- Water System Plan is at the same intervals original cost \$100K then 40 to 50K thereafter.
- Able to consolidate projects and leverage funds

REGIONAL WATER SYSTEM PLAN

SYSTEM WIDE CAPABILITIES

- Planning Document for forecasting needs,
- Capabilities and future water demand based on projected land uses over the following year intervals.
 - 6 yr
 - 10 yr
 - 20 yr
- Snapshot of current systems health.
- What's needed to meet current DOH standards
- What's needed to meet Mason County's planned future.
1.19 %
- 52,000 County residents today, projected at about 620 people/year
- Regional System could see 7-12 services per year growth
- The WSP is a road map for the PUD and DOH to provide Safe drinking water to its customers.

6 YEAR PLAN

Capital infrastructure needed for a Safe and Reliable Water System.

► Repair/Replace aging components

- Pipe replacement (ACC, Galvanized, Undersized for future use)
- Well and Booster Pumps and Pressure Tanks
- Distribution System Leakage (DSL) 20%

► Treatment

- Frequent coliform detections
- PUD does not currently have an automated treatment system

6 YEAR PLAN (cont.)

Capital infrastructure needed for a Safe and Reliable Water System.

► Water Storage

- Current System deficient by approximately 26,000 gallons.
- Projected System deficiencies 340,000 gallons
- Due to the DOH 200 gallons minimum storage std/ERU and 20% DSL
- 2015 most limiting factor is storage
 - Currently can serve 1,717 ERUs DOH Stds
 - Past WSP's allows 1,833 ERUs (116 ERUs)

6 YEAR PLAN (cont.)

Capital infrastructure needed for a Safe and Reliable Water System.

➤ Source Capacity Deficiencies

- 2017 system (-11gpm) for 18-hr of production
- 2022 (-95gpm) and at 20 years 2037 (-356gpm).

➤ Water System Plan Estimates

\$2M for the first 6 years but does not address source capacity issues.

10 YEAR PLAN

Water System Plan

- Plan for funding
- What the system needs
 - Growth
 - Source capacity
 - Water storage
 - Treatment
 - Distribution system
- What was accomplished
 - 6 year plan
 - Ultimate goal

10 YEAR PLAN (cont.)

Water System Plan evaluation and rewrite.

➤ Forecast

- New 6 year plan
- New 10 year plan
- Forecast 20 year plan

➤ Tools at hand

- This WSP will provide a road map for the future.
- Build on a good foundation

20 YEAR PLAN

➤ Long range Forecast

- Potential growth forecast*
- Forecast deficiencies*
- Strengthen customer, local, regional and County relationships

➤ Contingency Planning

- Robust and redundant systems (substation)
- Emergency response
- Long term results

➤ Leveraging available funds

- Drinking Water Revolving State Fund (DWRSF)*
- Rural Utility Service, low cost loans*
- Infrastructure Funding Programs, grants and loans*

* MUST HAVE A PLAN TO GET FUNDS

20 YEAR PLAN (cont.)

➤ **Future tools for future plans**

- Broad picture of the future water system
- Budgetary guidance
- Reminder of set goals
- Heavy lifting is has been complete

CONSOLIDATION BENEFITS

- It is important that people are heard and included
- All systems are currently owned and serviced by the PUD
- Protection of service area
- Robust and redundant system
- Protect environment
- Long range planning and stability of system
- More power to overcome road blocks



➤ Where is the Plan at this time????



Questions????