

# UNION REGIONAL WATER SYSTEMS CONSOLIDATION PLAN COMMISSIONERS WORKSHOP

JUNE 2017

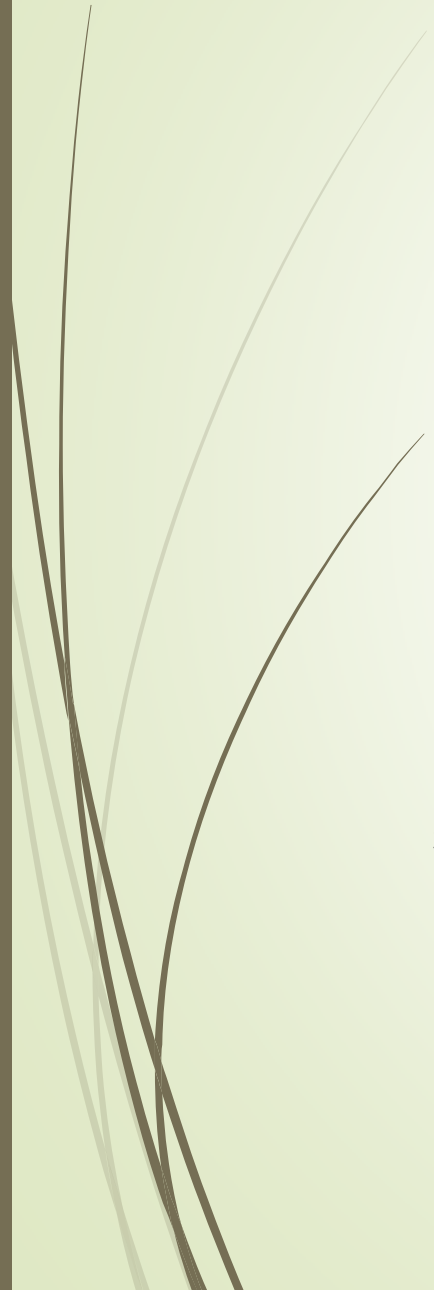


# INVOLVED WATER SYSTEMS

- 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





➤ Questions????