

Asset Inventory for Alaska Communities

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What is an Asset?

Over \$2 Billion
Invested in
Rural Alaska
Water and
Wastewater
Infrastructure



The
Investments
Have Been
Made in Over
200 Rural
Communities





The \$2 Billion Question: What Have These Investment Provided?

- Number of Communities with Piped Systems
- Number of Lagoons
- Number of Water Treatment Plants and Conditions
- Existing Assets for 2011 Tribal Drinking Water Infrastructure Needs Survey
- Asset inventory, the hardcopy version
- Assets Threatened Due to Changing Environmental Conditions

Asset Inventory On A Community Basis

TO HONEY BUCKET DUMP SITE

SEWAGE LAGOON

3,200' 6" FORCE MAIN

200,000 GALLON WATER STORAGE TANK

8,400' 4" HDPE CIRCULATING WATER MAIN

WEST LOOP: 51 BUILDINGS

SCHOOL

8,800' 4" HDPE CIRCULATING WATER MAIN

EAST LOOP: 43 BUILDINGS

3,053' 4" HDPE CIRCULATING RAW WATER LINES

OXSINUK WELLS

WATER TREATMENT PLANT (HEAT ADD TO WATER DISTRIBUTION BY HYDRONIC HEATING SYSTEM)

WTP WELL

8,000' 6" HDPE GRAVITY SEWER MAIN

8,000-GALLON INTERCEPTOR TANK

LIFT STATION

1 EXISTING WATER AND SEWER SYSTEM SCHEMATIC

3. DEMOLISH EXISTING WTP



Answering The \$2 Billion Question

- Developing an asset inventory database
- Asset (WST, WTP, Wells, Mains, Lagoons..)
 - Quantity (Feet, Gallons, Acres)
 - Materials
 - Age (Year installed)
 - Condition
 - A- No deficiencies related to the asset providing the intended service
 - B - Deficiencies that can be address with sufficient O&M practices
 - C - Deficiencies decreasing efficiencies and increasing O&M costs
 - D - Deficiencies effecting the quantity or quality of service and cannot be addressed by sufficient O&M practices
 - F - No longer capable of providing service, structurally failing, beyond repair
- Verify asset information
- Maintaining asset information

Other applications of an W&S infrastructure assets inventory:

- Useful in preparation for future funding/ having “ducks in a row” regarding need/vulnerable assets. Will allow managers and funders to be less subjective in the decision making process.
- Promotes community understanding of water and sanitation system value

Goal for Today's Workshop

- Discuss the value of an asset inventory database
- Discuss how to develop an asset inventory database
- Discuss ideas on how to collect and verify existing assets
- Discuss how to classify the condition of the assets, grades
 - Grades for condition
 - Grade for threat
 - Grade for impact of loss
 - Grade for health impacts
- Discuss how to keep the asset information current
 - Changing conditions
 - New Investments in infrastructure
- Comprehensive asset **inventory** useful from a community to a statewide basis
- Weighting/prioritization approach for the at-risk infrastructure identified

Questions

