

# InPipe Micro Hydro Turbine Project



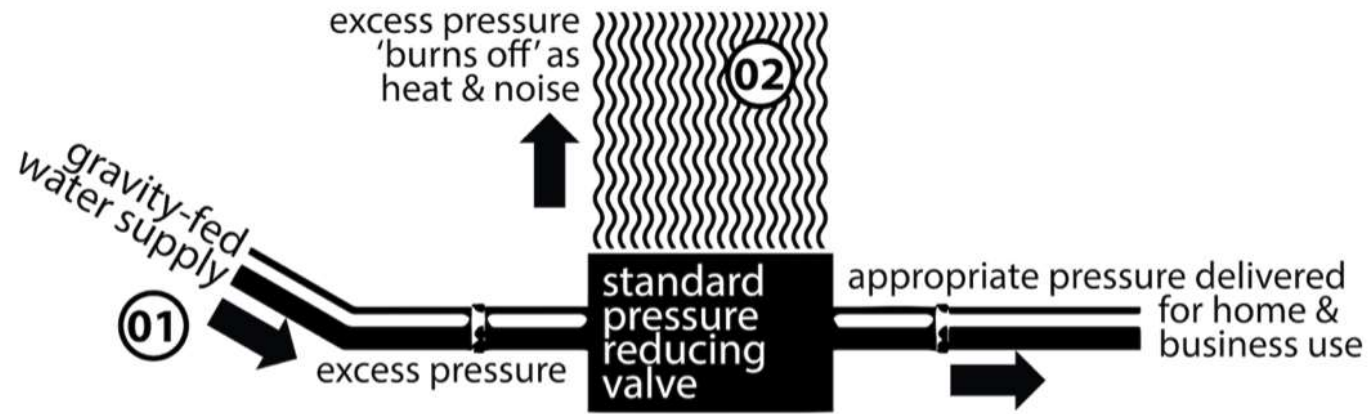
City Council Work Session  
June 10, 2024

# What is InPipe?

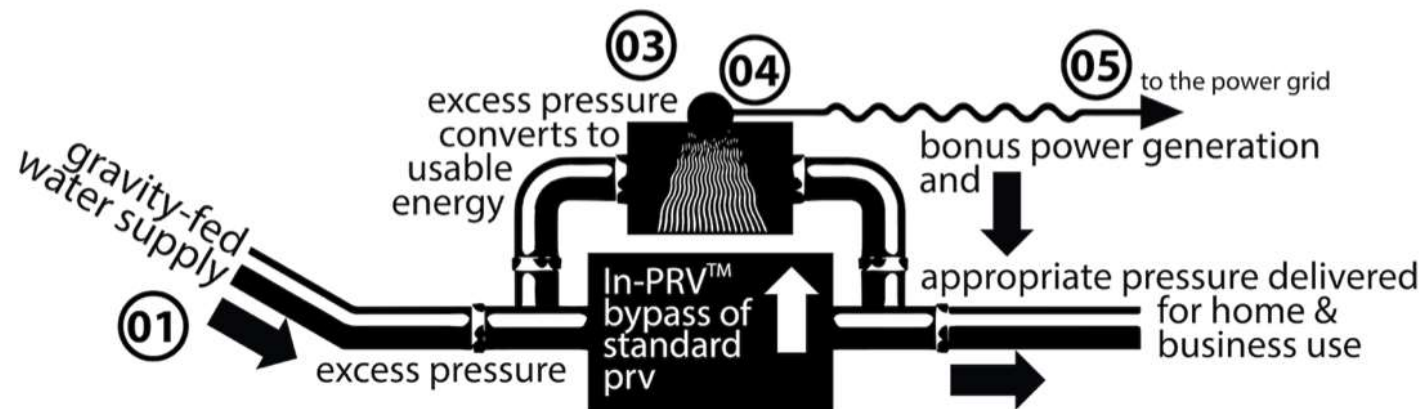
- Electricity generating turbine placed adjacent to high pressure water line
- Water flows are diverted through turbine, electricity generated
- Electricity 'net metered' via arrangement with PGE
- Estimated life span: 30-years or longer
- Operational considerations



## standard pressure reducing



## The In-PRV™ energy recovery & pressure reducing solution





# Other Users of InPipe

- City of Hillsboro <https://www.youtube.com/watch?v=n2yTJQsAptw>
- Skagit P.U.D. – Mt. Vernon Washington
- East Bay M.U.D. – Oakland, California



# Benefits of InPipe

- Relatively 'short term' project
- Little to no ongoing maintenance – 30-year est. life
- Climate Action initiative – 278,000 kWh clean electricity
- Visible and easy to tout project
- Can have a short payback period (large amount of external funding available)

# Costs and Opportunities

- Cost of InPipe: \$690,295
- External Funding Opportunities – grants and incentives!
- Payback Period



		Payback
Cost of InPipe	<b>\$690,295</b>	18.0 years
40% Direct Pay (Inflation Reduction Act)	<u>- \$276,000</u> \$414,295	12.5 years
Energy Trust of OR –	<u>- \$124,000</u> \$290,295	9.0 years
OR Dept. of Energy –	<u>-\$100,000</u> <b>\$190,295</b>	6.5 years

# Sole Source Contract

- Patent pending energy recovery system
- Unique design integrates seamlessly with existing water system
- InPipe provides assistance obtaining external funding
- **If Council would like to proceed, authorization for sole source contract with InPipe is on consent agenda, Resolution 5778-24**

Comments or  
Questions?