

Water Reuse Opportunities with Seattle Steam

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Seattle Steam Company

- Utility Service Since 1890
- Our 200 customers represents about 7% of the energy consumed in the City of Seattle
- Biomass (renewable) fuel began in December 2009
- Consume 20,000+ CCF annually



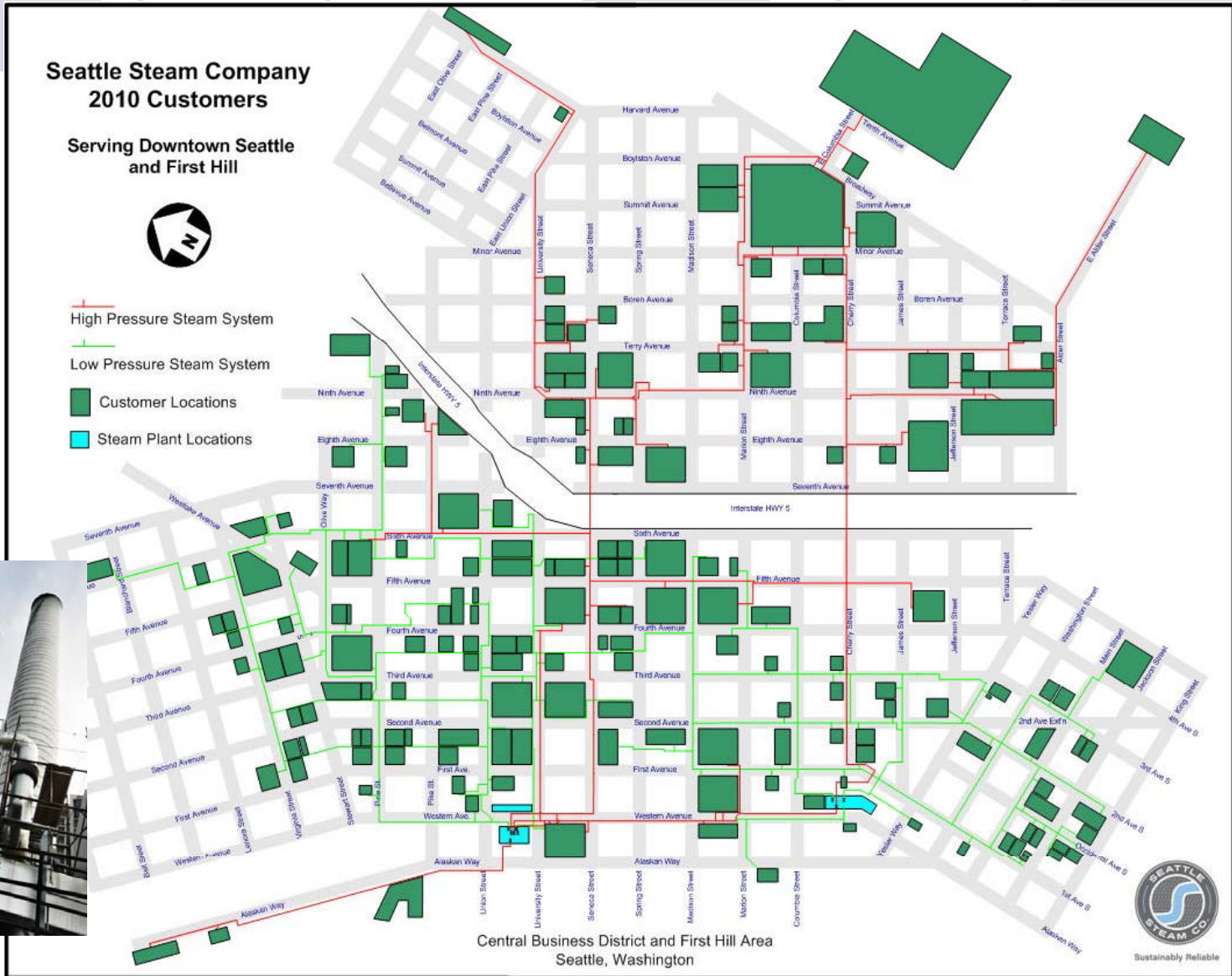
Seattle Steam Distribution

Seattle Steam Company 2010 Customers

Serving Downtown Seattle
and First Hill



- High Pressure Steam System
- Low Pressure Steam System
- Customer Locations
- Steam Plant Locations



What is Condensate?

Condensate is the resulting water upon the removal of energy from steam. Condensate is:

- Distilled
- Generally warm (90 – 120 degrees)
- Mineral free
- Non-potable
- Useful!



Condensate Uses

- Water for Laundry's
- Gray Water Systems; Toilets / Urinals
- Make-up Water for Cooling Towers
- Water Features
- Irrigation Systems
- Re-charge for Sprinkler systems
- Pre-rinse for Dishwashers
- Car Wash
- Provides LEED Credits



Seattle Steam Customers Re-using Condensate Now

Fairmont Olympic Hotel

- Pacific NW only Five Diamond Hotel
- 450 Guest Rooms
- 4 Restaurants
- High & Low Pressure Customer
- Steam for Heat, Hot Water & Laundry



Seattle Steam Customers Re-using Condensate Now

Fairmont Olympic Hotel

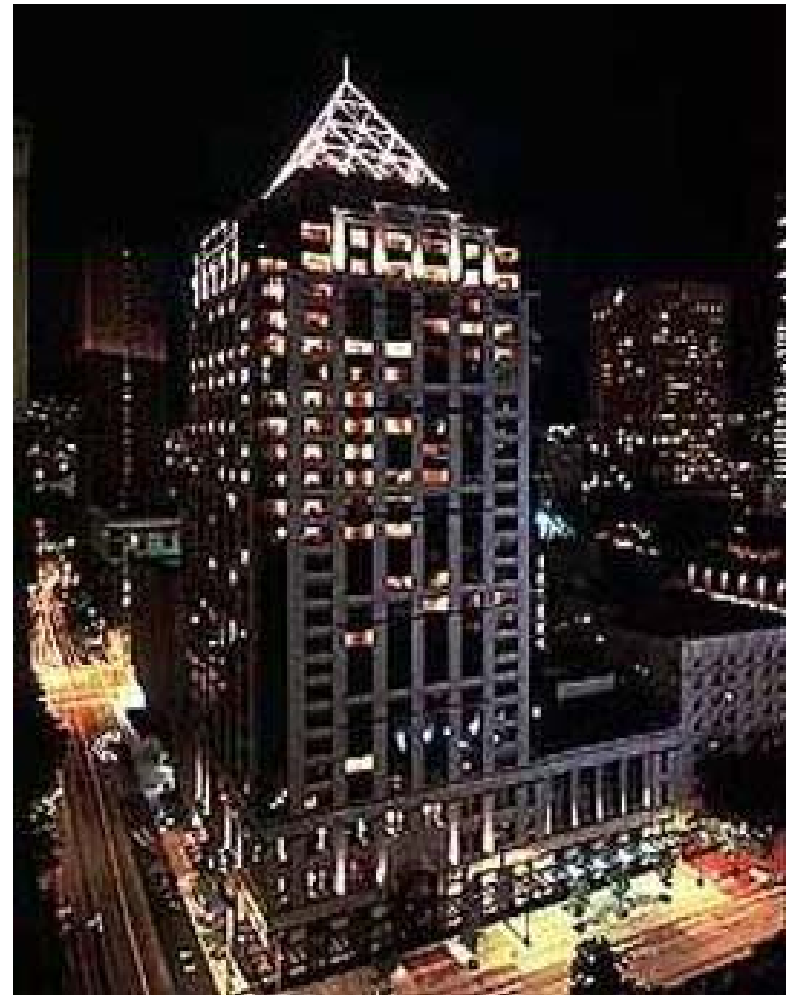
- Upon the extraction of all useful energy from the steam and condensate, the condensate is collected in a series of condensate storage tanks.
- This collected condensate is then used in the laundry and dishwashing pre-cycles to reduce purchased potable water from SPU avoiding water & sewer charges.



Seattle Steam Customers Re-using Condensate Now

W Hotel

- Four Diamond Hotel
- 426 Rooms, 3 Restaurants
- High & Low Pressure Customer
- Steam for Heat, Hot Water & Laundry



Seattle Steam Customers Re-using Condensate Now

W Hotel

- A SPU supported water and condensate recovery system that has recycled 1.5 million gallons of water saving the hotel significant water, sewer and energy charges.
- The W Hotel captures condensate and laundry wash water which is then filtered, stored and redirected for use in the laundry's wash cycles.



Seattle Steam Customers Re-using Condensate Now

Hilltop House

- A non-profit senior retirement community on First Hill
- 125 Permanent Residences



Seattle Steam Customers Re-using Condensate Now

Hilltop House

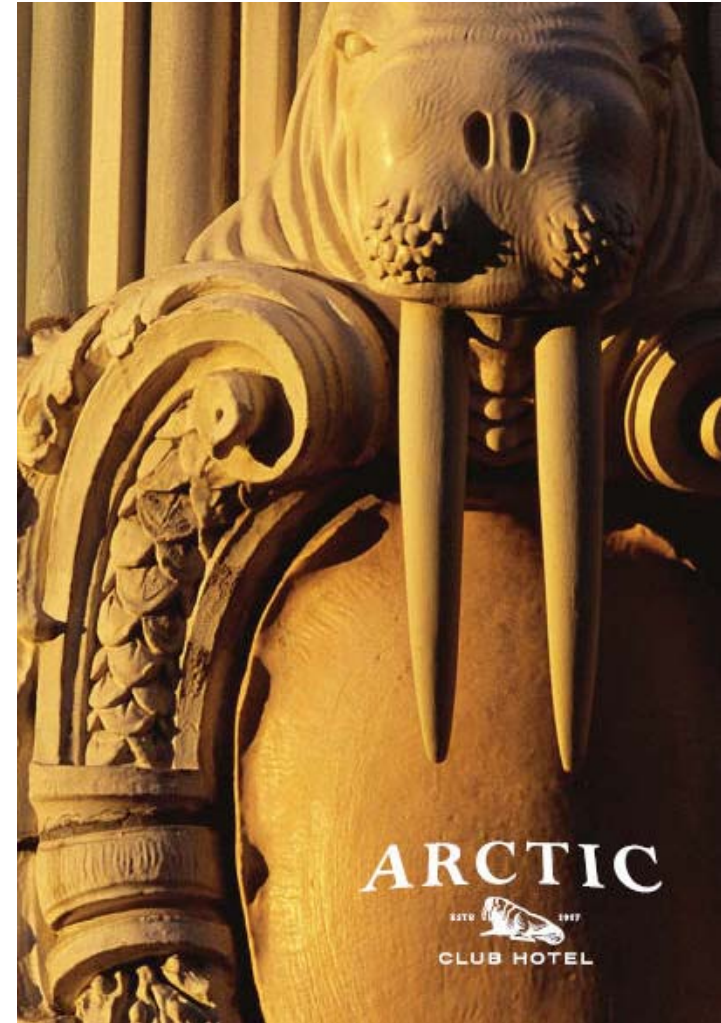
- With mechanical engineering by Richard Alescio & Associates and financial support from SPU and the City of Seattle, Hilltop House completed work to introduce condensate into several of their existing water systems saving thousands of dollars in annual utility bills.
- The project redirected condensate to flush five community toilets and supply water to three commercial clothes washers and one dishwasher.



Seattle Steam Customers Re-using Condensate Now

Arctic Club Hotel

- Four Diamond Hotel
- 120 Rooms, 3 Restaurants
- A Seattle landmark rich in history was recently fully restored



Seattle Steam Customers Re-using Condensate Now

Arctic Club Hotel

- Much like the Fairmont Hotel, condensate is collected in a series of condensate storage tanks.
- The collected condensate is then used in the laundry and dishwashing pre-rinse to reduce purchased potable water from SPU.





We Can Assist You

Seattle Steam is happy to help assemble a team of licensed engineers and contractors to develop a plan and budget for your facility.

To get started contact

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