Biosolids
Public Information Session

27 April 2017

Samantha Stoughtenger, CBJ Utilities Superintendent

Marissa Capito, CBJ Utilities Engineer Assistant I
Nathan Coffee, CBJ Engineering Project Manager
Biosolids start here

1.1 billion gallons of water produced and treated every year
Wastewater Treatment Systems

ABTP

MTP

JDTP

Pie chart: 67% MTP, 31% JDTP, 2% ABTP

Map of wastewater treatment systems.
Treatment Capacity

- **ABTP**
- **JDTP**
- **MTP**

<table>
<thead>
<tr>
<th>Daily Flow (MG)</th>
<th>MTP</th>
<th>JDTP</th>
<th>ABTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Treatment Process

1. Headworks
   Screening & grit removal

2. Biological Treatment
   Aeration & settling
   Liquid effluent
   Solids pumped from tanks to be dewatered

3. Disinfection
   UV or chlorine

4. Discharge
   Local waterbody

5. Solids Processing
   Dewatering & disposal

Influent Enters Plant from Collections System

Solids Landfilled

Belt Filter Press

Sludge Shipping Container

Oregon Landfill
Biosolids History

7000 tons/year

- 76% MTP
- 24% JDTP

1965 MTP Online
1974 JDTP Online
1965 - 1979 Holding Ponds @ JDTP
1977 ABTP Online
1979 - 1992 Landfill @JDTP
1992 - 2010 Incineration @ JDTP
2010 - 2013 WM Landfill in Juneau
2011 - 2017 Barge & Landfill in OR
Biosolids Future

- $2M annual cost
- Highly uncertain
- Labor and time intensive
How the dryer works
Before and After
During Construction

- Building demolition
- Site work
- Dryer installation
- Building construction
- Testing and startup
- Reuse discussion

- Traffic
- Noise
- Site Work / Activity
Take a look inside

- Bagging Station
- Heating Unit
- Hoppers
- Dryer
Final Site
Post-Construction

- **Facility Operation**
  - Long-term and stable solution
  - End product volume reduction
  - Improved odor containment
  - Less large vehicle trips

- **Pellets Reuse**
  - Landfill cover
  - Erosion control and topsoil enhancement
  - Fertilizer
  - Alternative energy source
  - Reclamation
Questions?