**Deschutes County Department of Solid Waste**

**Solid Waste Advisory Committee (SWAC)**

**September 25, 2018**

**1:30 p.m. – 3:30 p.m.**

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|  | **Committee Members:** |  |  |  |  |
| 🗸 | Jerry Andres  Citizen at Large |  | Paul Bertagna  City of Sisters |  | Mike Riley  The Environmental Center |
| 🗸 | Brad Bailey  Bend Garbage and Recycling | 🗸 | Catherine Morrow  Citizen at Large | 🗸 | Erwin Swetnam  Cascade Disposal |
| 🗸 | Jared Black  Citizen at Large |  | Jake Obrist  City of La Pine |  | Rick Williams  Citizen at Large |
| 🗸 | Bill Duerden  City of Redmond | 🗸 | Gillian Ockner  City of Bend |  |  |
|  |  |  |  |  |  |
|  | **Consultant(s):** |  |  |  |  |
| 🗸**C** | Doug Drennen  JRMA | **\*C** | Jennifer Porter  GBB | **\*C** | Steve Simmons  GBB |
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|  | **Dept. of Solid Waste Staff:** |  |  |  |  |
| **S** | Chad Centola  Operations Manager | 🗸**S** | Sue Monette  Management Analyst | 🗸**S** | Timm Schimke  Director |
|  |  |  |  |  |  |
|  | **Elected Official(s):** |  |  |  |  |
| **E** |  |  |  |  |  |
|  |  |  |  |  |  |
| 🗸**G** | **Guest(s): 10** |  |  |  |  |
|  |  |  |  |  |  |
| *🗸* | *Present at meeting* | *\** | *Teleconference* | ***C*** | *Consultant* |
| ***E*** | *Elected Official* | ***G*** | *Guest* | ***S*** | *Staff* |

Decisions/Actions Taken by the Committee in Blue

Items Requiring Follow-up in Red

**Call to Order**: The meeting was called to order by Timm Schimke, Deschutes County Department of Solid Waste Director, at 1:38 p.m.

1. **Welcome & Introductions**:

Timm Schimke opened the meeting, acknowledged the guests, and indicated there was time on the agenda for public comments. As there were several new people in the room, Timm asked that everyone introduce themselves. Doug introduced Steve Simmons and Jennifer Porter, both from GBB, who were on the speaker phone. GBB was the primary author of Chapter 6 which is being presented today.

**Review/Approve Minutes:** Timm Schimke

Timm requested the SWAC approve the past minutes from the May, June and July meetings. Action: Erwin Swetnam made the motion and Brad Bailey seconded to approve the May, June and July 2018 minutes. The committee unanimously approved the minutes as written.

1. **Review of Actions:** Doug Drennen
2. **Review of Survey Results:**  Doug Drennen

Doug welcomed the SWAC members back since no meeting was held in August. Before starting the agenda and review of actions, Doug provided a brief update on the responses to the survey/questionnaire released at the public meeting in June. There were 167 responses and a few more were received just in the past week. There were 130 comments, generally favorable to expanding recycling opportunities and making recycling easier. The latest [Deschutes County Survey Responses](https://www.deschutes.org/sites/default/files/fileattachments/solid_waste/page/11560/deschutes_county_survey_responses_2018.09.13.pdf) summary can be found on the County website [www.deschutes.org/sw](http://www.deschutes.org/sw) under the Planning page.

Doug mentioned the survey is not a scientific survey to support any one decision and results are to provide some guidance to SWAC on what people think about the different program options. Timm stated the County will compile survey results and distribute them later in the year as the SWAC makes decisions on the preferred programs. Additional surveys aimed at providing input into specific alternatives could be conducted down the road.

1. **Review Chapter 6 – Alternative Technologies and Solid Waste Disposal:** Doug Drennen & Steve Simmons

Today’s meeting will be to discuss Chapter 6 – Alternative Technologies. Several alternative technologies (ATs) are now commercially viable and might be considered as part of the future Deschutes County solid waste system. This is consistent with the State waste management hierarchical strategy to consider waste as a resource and reduce what is disposed in landfills. These technologies are part of thoroughly reviewing all options for managing waste in the SWMP.

With the completion of draft Chapters 3 and 4, we have identified targeted materials and generators as well as evaluated programs for recycling more materials and reducing what will be disposed in landfills. We have also completed Chapter 5 which considered the condition of the transfer station system and identified the investments needed to meet both immediate and long-term needs. Chapter 6 examines the status of the various technologies being used to convert or transform waste into renewable resources such as compost and fuel by-products. It is important to consider all options for reducing waste disposed.

Doug started the presentation reviewing existing conditions. Currently, the recovery rate for the County is 33% and 181,000 tons of waste was disposed in 2017. Timm is projecting that in 2018 the amount of waste disposed at Knott is estimated to be 192,000 tons. This represents a 6% increase, which is half the increase experienced in previous years. Doug indicated the projection of waste available for ATs and/or future disposal will reflect a conservative estimate. This assumes the recovery rate will continue to be 33%, even though we expect this recovery rate to increase with the programs identified in earlier Chapters. Also, the waste generation rate will be constant for the immediate future, even though it is projected to decline due to the fact there is less paper and more plastics in the waste stream. These projections indicate that by the time the Knott Landfill closes in 11 years, it is estimated over 210,000 tons per year will be disposed. Over the next 20 years the County will need to dispose of almost 5 million tons.

Action: Catherine Morrow requested the consultants provide the optimistic percentage to highlight the impact to the landfill based on reducing waste.

The cost to dispose of a ton of waste at Knott Landfill averages between $33 and $35 per ton depending on how much waste is disposed. This information is provided so SWAC has some metric to compare the cost of the alternatives that are being considered.

Steve Simmons of GBB reviewed the list of technologies presented in Chapter 6. He explained that several technologies are not feasible for further consideration by the County. Technologies such as mass burn, pyrolysis/gasification and gasification to produce electricity require more waste than the County currently generates to be cost effective. Technologies to be considered included advanced C/D processing, anaerobic digestion (AD) with aerated static pile composting (AEP), and mechanical–biological treatment (MBT) to produce alternative fuels and bio fuels.

Steve described the various technologies and the benefits of each. SWAC members and the public asked questions regarding the different options. After discussing each technology, Steve presented the cost of the different technologies. In summary, these technologies are proven and, in some cases, are still going through start up in the United States. Cost of the ATs are estimated to range from $50 per ton to $70 per ton. These are all capital intensive projects that can cost between $50M to perhaps $250M to build. Steve explained they require vendors or users for the fuel products generated from these different technologies. These technologies are primarily being considered in countries and states that have renewable energy tax incentives such as Canada and California, as well as some east coast cities. Certain factors need to be in place to make these technologies feasible. For instance, in California several AD facilities are now operating because of regulations that require collection fleets to use alternative fuels such as compressed natural gas (CNG) to reduce emissions from diesel engines. These AD facilities use food waste mixed with green waste and/or mixed organics from MRFs to produce CNG to fuel trucks. For these technologies to make sense, users/markets for alternative fuels or energy tax credits are needed. Also, locations experiencing high tip fees for disposal can consider ATs.

After some discussion by the SWAC, Doug summarized stating ATs have continued to gain operating experience to the point where they are commercially viable. These technologies can reduce the amount of waste needed to be landfilled. From the information presented, it does not appear that an AT to transform waste into some renewable energy is practical for Deschutes County at this time. However, circumstances can change and there may be conditions that might make an AT possible in the future.

Action: Brad Bailey requested the consultants update the AT Summary table to add a column to highlight the tonnage or amount of waste stream diverted.

Action: The SWAC requested the SWMP include a table that shows the impacts on the waste stream if an AT is constructed. Specifically, how much waste would need to be disposed if an AT facility were built.

1. **Next Meeting:** SWAC Advisory Group meetings will be held the 4th Tuesday of each month at the Deschutes Services Building (1300 NW Wall St., Bend, OR 97703) from 1:30 p.m. – 3:30 p.m. Public meetings will be held in the evening. The next Solid Waste Advisory Committee meeting is **October 23, 2018 1:30 p.m. – 3:30 p.m.**

**Meeting Adjourned**: 3:18 p.m.