King County Green Schools Program
Food Scrap Recycling
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Food Scrap Recycling Session

- **Presentation 1**:

  Why, what and how of school food scrap recycling
- **Presentation 2:**

  Collection from schools for off-site composting
- **Presentation 3:**

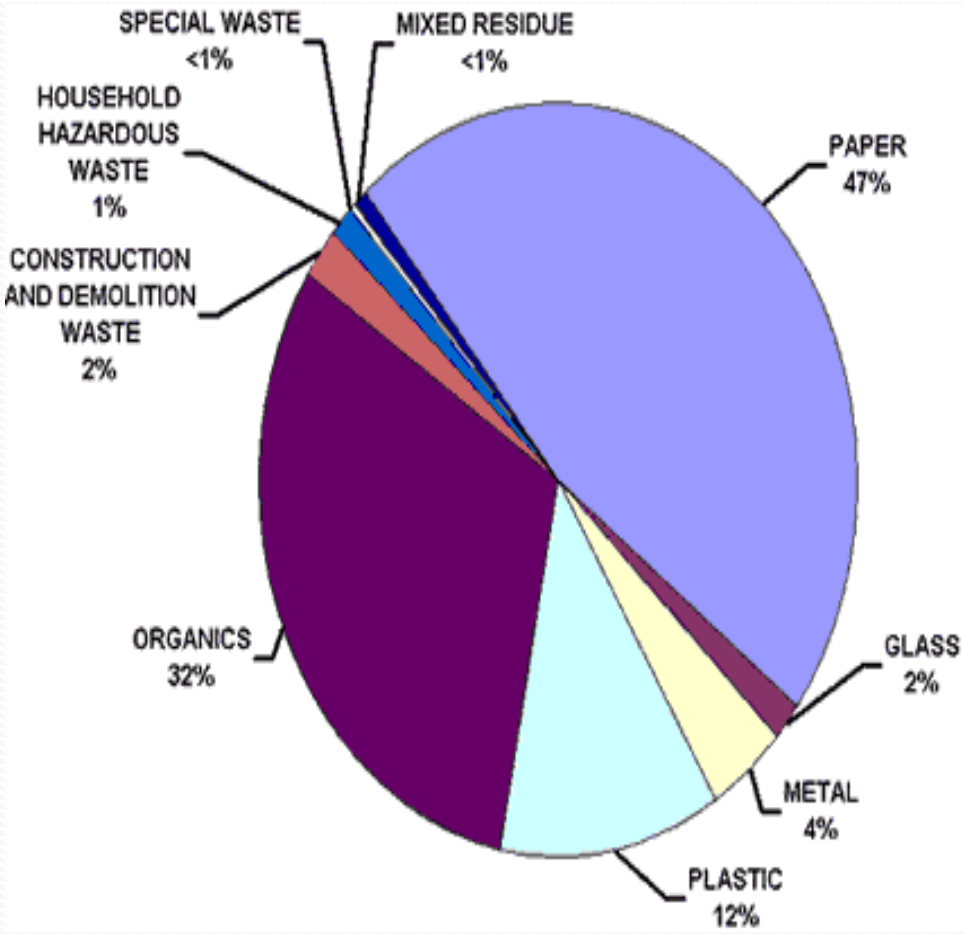
  On-site composting
- 5 minutes of Q&A after each presentation
- **Discussion**: Share your experiences, challenges and best practices

How Many Schools?

- Participants in the room?
- Schools in King County/Seattle with food scrap collection:
  - Over 80 with Cedar Grove
  - 22 with Waste Management (Kirkland/Redmond)
- Contractor has worked with 29 schools to set up food composting in elementary, middle and high school cafeterias in Bellevue, Issaquah, Kirkland and Redmond - total of 15,000 students.

How Much? Quantity of Food Scraps in School Solid Waste

- **What is generated by schools? (weight)**
  - Paper 47%
  - **Organics 32%**
  - Plastics 12%
  - Metal 4%
  - Glass 2%
  - Other 3%



How Much? Quantity of Food Scraps in School Solid Waste

Quantity depends on…

1. Size of school – number of students
2. How much organic material is collected (kitchen only, or students also)
3. Use of compostable products (trays)

Cedar Grove picks up a range of

1 – 16 cy/month in schools

Benefits of Food Scrap Recycling in Schools

- Diverts compostable materials from the landfill
- Saves money
- Conserves resources
- Reduces greenhouse gas emissions
- Educates students

Food Scrap Composting: Lesson Integration

- King County workshops
  -- we'll teach it for you!
- Green Schools Team projects
  -- worm bins and lunchroom monitoring
- Lessons on food decomposition
  -- fit well with cycles lessons
- Can be included in native planting units

Challenge: Cost of Collection

- Solutions
  - City of Kirkland and City of Redmond – composting collection is embedded in garbage cost
  - Add food scraps to yard waste dumpster (collection must be at least once a week)
  - Reduce garbage dumpster size or frequency of collection to offset cost of new program

What is Compostable?

- Food scraps
  - Meat, bones, dairy
  - Fruit and vegetable scraps
- Food soiled paper (non-coated)
- Kitchen paper towels
- Napkins

- Conventional Plastics
- Metal
- Trash/Litter
- Liquids
- Oils
- Hazardous Waste
- Styrofoam
- Dirt or Rocks

Program Components

- Who to involve
- Waste assessment
- Materials needed
- Training and outreach
- Monitoring
- Ongoing promotion

Who to Involve

- District staff: Resource Conservation Manager (RCM) or Facility Manager; Head of School at private schools
- Food services/purchasing sta
- Principals
- Hauler
- Custodial staff
- Teachers and other staff
- Student groups and classes
- Parent groups

Materials Needed

- Outdoor container from hauler
  - Carts
  - Dumpsters
- Indoor collection containers
  - 20 gallon container
  - 32 gallon container
  - “Slim jims” – 20 gallon
  - Color coded
  - Color tape
  - Signs
- Bags to line indoor containers
  - Bio-bags (compostable)
  - Trash bags
  - No bags

Challenge: Bagging Materials

- Solutions
  - Use bio-bags. These cost more than regular plastic trash bags, however.
  - Use regular plastic garbage bags, dump contents into hauler's outdoor container -- and then dispose of the empty plastic trash bag in the garbage. (Cedar Grove rubber bands can help.)
  - Do not use bags - rinse out collection containers daily (Use a mop drain, not a storm drain.)

What it looks like . . .

Training and Outreach

- Presentations - assembly/classroom/staff meeting
- Signs
- Announcements
- Props
- Characters
- Handouts/ posters

Great way to involve

a student group!! Key to success!!

Kick Off Week

- Announcements at lunch
- Posters/signage
- Staff/principal involvement
- Wear green
- Monitors at stations
  - Identification for monitors

Monitoring

- Pairs of students, parent, staff
- Wear green on kick off, aprons, stickers, pins, lanyards
- For two weeks every day
- Once a week - thereafter
- Middle school and high school specifics

Case Study

- **Lake Washington School District**
  - Estimated annual cost savings from participating Redmond and Kirkland schools: $35,000.
  - On average 50 - 60% reduction in garbage on the first day of the program.
  - Composting food scraps plus use of durable products account for these savings.

Case Study

- **Tahoma Junior High** (Tahoma School District)
  - Cedar Grove collects 16 yards of organics/month
  - School eliminated a 4-yard garbage dumpster, saving $400/month.
  - With savings, the district pays Cedar Grove for weekly collection of organics. Cost: $151.80/month
  - Net savings: $248.20/month

Questions?