

Title:**Diversion of putrescible organics from the MSW stream for creation of green energy and organic soil amendments****2009 Action Description:**

Subsidize use of compost/organic amendments on agricultural lands by providing a per ton subsidy to farmers Statewide using the existing State Conservation District infrastructure. The subsidy would be available annually for a fixed time period. The subsidy would cover use of compost/organics at agronomic loading rates with a fixed amount of funding available per county. The rate of funding available per county would be determined based on farm acreage.

The State Conservation Districts work in close partnership with the USDA National Resource Conservation Service Environmental Quality Incentives Program (<http://www.nrcs.usda.gov/PROGRAMS/EQIP/>). The EQIP program currently subsidizes adoption of environmentally friendly farming practices- largely through paying a portion of capital cost for equipment. Use of compost is in the EQIP list of priorities. Funds would be provided to the Conservation Districts for distribution through the EQIP program for the specific purpose of subsidizing compost/organics purchases by farmers.

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Basis for Selection:

- **Diversion of putrescible organics (examples include yard waste, food waste, and other high moisture content wastes) from the MSW stream offers the potential to generate GHG credits through methane avoidance. In addition, these materials have value for green energy re anaerobic digestion and as soil amendments. Anaerobic digestion and land application of digestates post energy extraction are complimentary processes. Use of organic soil amendments can generate GHG credits by substituting for synthetic fertilizers, reducing irrigation requirements by increasing soil water holding capacity and increasing total soil carbon. This ‘grave to soil’ approach offers the potential to generate GHG credits in three ways:**
 - **Methane avoidance through landfill diversion**
 - **Green energy through anaerobic digestion**
 - **Ag credits through use of organic soil amendments**
- **It is a low cost option with technology and limited capacity for anaerobic digestion in hand and with pre-existing infrastructure and facilities for composting residuals (in lieu of digestion or post digestion)**

Implementation Approach and Mechanisms:

- **Budget request:**
- **Funding for statewide subsidy for agricultural use of compost/organics on farmlands, financial support for this has yet to be identified**
- **Example for Yakima, Kittitas, Chelan/Douglas, Spokane and Grant Counties**

- **Each of these counties has a permitted operating or soon to be operating compost facility. There is high value agriculture in many of these counties including high tree fruit production. Providing subsidies for farm purchase of compost up to 25,000 dry tons per county to be used at an agronomic loading rate of 5 dry tons per acre at a subsidy rate of \$8 per dry ton. Total cost for 5 counties would be \$1.5 million. Total acreage covered would be 5,000 acres per county. Total feedstocks used to produce compost per county would be approximately 75,000 dry tons.**
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- **Specific deliverable- define statewide subsidy level/ integrate into State Conservation District funding**
- **Requires identification of a revenue source to fund**

Supporting Information:

- **Methane avoidance of approximately 1 ton CO₂ per wet ton of organics**
- **Additional benefits-**
 - **Agriculture- synthetic fertilizer avoidance, carbon sequestration total GHG savings approximately 2 tons CO₂equivalent per acre**
 - **Energy- 1 dry ton of food waste will produce 0.26 tons of CH₄**
- **Cost per ton of CO₂ saved is very low- added benefits of increased soil tilth and productivity**
- **Benefits to be seen by agricultural sector across the State-**
 - **improved soil productivity**
 - **improved water quality**
 - **improved crop yields and quality**
- **Creation of jobs re anaerobic digestion, compost production will be distributed between public and private sectors**
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