**Conservation Practice Effects**

|  |  |
| --- | --- |
| **Agrichemical Handling Facility (No) 309**  **Definition: A facility with an impervious surface to provide an environmentally safe area for the handling of on-farm agrichemicals.**  **Major Resource Concerns Addressed: Water quality, groundwater protection.**  **Benchmark Condition: Orchard and vineyard.**  **Date: October, 2016 Developer/Location: Hal Gordon, OR** | |
| **Positive Effects** | **Negative Effects** |
| **Soil**   * **Reduce risk of soil contamination.**   **Water**   * **Protect surface and groundwater with spill containment during pesticide, fertilizer and other chemical mixing operations.**   **Air**   * **Proper handling of solid agrichemicals can reduce emissions of particulate matter.** * **Proper handling of nitrogen-based fertilizers can reduce emissions of ammonia.** * **Proper handling of organic liquids can reduce emissions of VOCs.**   **Plants**   * **Increase plant productivity with better management.**   **Animals**   * **Damages to fish and wildlife habitat reduced.**   **Energy**   * **Less agricultural chemical use with better storage and management.**   **Human**   * **Improved flexibility, timing and management options with facility.** * **Increase in crop/livestock yield with improved chemical management.** * **The facility may make other agricultural activities more profitable.** * **Increase yields/reduce costs as land becomes more productive.** * **Create sustainability of natural resources that support your business.** * **Increase the property value (real estate) of your property.** * **Prevent off-site negative impacts.** * **Comply with environmental regulations.** * **Save time, money and labor.** * **Promote family health and safety.** * **Make land more attractive and promote good stewardship.** * **May be eligible for cost share.** | **Land**   * **Cultural resources may be affected if site is excavated, historic properties may be impacted.** * **Slight change in landuse to headquarters.** * **Minor amount of land taken out of agricultural production.**   **Capital**   * **Purchase some on-site equipment & installation costs.** * **Annual operation and maintenance costs for storage structure and equipment.**   **Labor**   * **Additional time to clean equipment and store materials.**   **Management**   * **Increase in record keeping.**   **Risk**   * **Monetary annual costs may be greater than annual benefits (the facility may make other activities more profitable).** |
| **Net Effect: Agrichemical Handling Facility protects soil and water quality at a minimal cost.** | |

**Commonly Associated Practices:** Integrated Pest Management, Nutrient Management

**Note:** This worksheet contains general talking points for the conservation planner to discuss with the land user. It is the first step towards an economic or financial analysis. The second step would include identifying a specific site for analysis at the farm or field level, editing the template for local conditions, adding units and quantities of farm inputs and outputs. The third step in the economic analysis is to place a dollar value on as many variables as possible, put all units in the same time frame, using amortization ($/Acres/Year) or net present value ($/Acre), so benefits and costs can be compared. The fourth and final step would be to combine several conservation practices into a conservation system, which is how most conservation practices are applied at the field level. Data for the worksheet comes from the land user, conservation planner, technical specialist and local agricultural supply vendors and contractors. See Economics Technical Note: TN 200-ECN-1, Basic Economic Analysis Using T-Charts (August 2013) for more information.