**Conservation Practice Effects**

|  |
| --- |
| **Pond Sealing or Lining, Concrete (Ft2) 522****Definition: A liner for an impoundment constructed using reinforced or non-reinforced concrete.****Major Resource Concerns Addressed: Water quantity, wildlife habitat.****Benchmark Condition: Leaky pond adjacent to headquarters.****Date: October, 2016 Developer/Location: Hal Gordon, OR** |
| **Positive Effects** | **Negative Effects** |
| **Soil*** **Lining decreases soil contamination immediately below the pond.**

**Water*** **Reduced seepage from pond.**
* **Reduced seasonal high water table in the immediate area of the pond and less contribution to the ground water.**
* **Retention of water in pond will allow more optimal use of water for irrigation, wildlife and livestock use.**
* **Reduced delivery of nutrients, salts, pathogens, manure and agricultural chemicals to surface and ground water.**

**Air*** **None.**

**Plants*** **Additional water to facilitate grazing management improve growth and vigor of plants.**

**Animals*** **Fish and wildlife habitat improved by extending the duration of water in pond.**
* **Lining will prolong availability of water for livestock.**

**Energy*** **None**

**Human*** **Reduced labor maintaining pond and distributing water.**
* **Improved agricultural operation flexibility and timing with reduced seepage losses.**
* **Increase yields/reduced costs as land becomes more productive.**
* **Create sustainability of natural resources that support your business.**
* **Increase the property value (real estate) of your property.**
* **Improve habitat for wildlife.**
* **Conserve water for periods of drought and future use.**
* **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 disturbed if earth moving is below previous plow zone.**
* **No change in land use or land in production may.**

**Capital*** **No additional field equipment required.**
* **Installation equipment.**
* **Materials.**
* **Annual operation and maintenance costs to clean-out debris, repair and replace materials.**

**Labor*** **None.**

**Management*** **No change in management.**

**Risk*** **None.**
 |
| **Net Effect: Improved water quantity and wildlife/livestock habitat at a moderate cost.** |

**Commonly Associated Practices:** Irrigation Reservoir, Irrigation Water Management, Nutrient Management, Pond, Waste Treatment, Waste Treatment Lagoon.

**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.