

Evolution of Delaware's Open Marsh Water Management - Paul Zarebicki

- 1) What is OMWM?
 - a) Management tool used in coastal saltwater marshes to reduce mosquito breeding
 - b) Improves habitat resources for fish and birds
 - c) Restores marsh quality
- 2) Budget -
 - a) Use to do 3000 acres a year
 - b) Down to under 100 acres
 - c) Winter activity
- 3) Army Corp of Engineers permit - every 5 years
 - a) Pre- and post-project evaluations of vegetation
 - b) Evaluation of benefits
- 4) Benefits
 - a) Uses selective excavation of mosquito-breeding habitat to produce permanent water ponds that support fish
 - b) Cost saving - pesticide use reduction
- 5) Minimizing environmental impact
 - a) Spoil is thinly spread to avoid changes in vegetation
 - b) Non-tidal and semi-tidal areas
- 6) Equipment used
 - a) Rotary Excavator
 - i) Used on larger, softer marshes
 - ii) Large scale projects
 - b) Conventional equipment used in smaller, more mineral environments
 - c) Swamp Devil
 - i) Open water areas
 - ii) Mudflat habitats
- 7) Changes in program
 - a) Seeing rising sea levels
 - i) Changes in habitat seen - losing vegetation
 - ii) Drier areas are now wet and breeding
 - b) Traditionally
 - i) Treated upper tidal areas
 - ii) Larger areas
 - c) Newer projects - "higher" areas
 - i) Low lying agricultural fields and vacant lots
 - ii) Traditionally were too dry to be big breeding problems
- 8) ~4000 acres of OMWM currently installed in Delaware
 - a) Re-evaluating the older systems
 - b) Maintaining where required
 - c) Very effective for mosquito control