Salt Creek Watershed Management Efforts in the Watershed

Salt Creek Watershed Management Plan
Year: 2008
Hydrologic Unit Code (HUC): Plan completed at the 11-digit level. 04040001050
Plan Coordinator: Save the Dunes Conservation Fund: Water Resources Division
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E.Coli: As part of the Salt Creek Watershed Management Plan assessments were completed to determine if the watershed was impaired for E.coli. E.coli is a bacteria associated with the intestinal tract of warm-blooded animals. The presence of E.coli in water is a strong indication of the presence of sewage or animal waste contamination. Sources of E. coli can be, but are not limited to, runoff from animal pastures and livestock pens, poorly functioning septic systems, runoff from areas with high concentrations of pet waste, combined sewer systems (a sewer receiving both intercepted surface runoff and municipal sewage), illicit discharges, and natural wildlife. Most sites in the watershed exceeded the Indiana standard for E.coli with 67% of stream assessments failing to meet the standard. Mitigation activities identified in the plan include reducing agriculture sources of E.coli, reducing the occurrence of combined sewer overflows (CSOs), educating the public on septic system problems and prevention, and encouraging and educating the public to properly dispose of pet waste.

Biotic Communities: Biotic community assessments of the Salt Creek Watershed indicated poorly rated aquatic life communities. Biotic communities are all the interacting organisms living together in the same habitat. Macroinvertebrates, or animals without backbones, make up much of the aquatic biotic community in rivers and streams. Aquatic macroinvertebrates are important indicators of environmental change because they can indicate water quality. Samples of macroinvertebrates from the watershed were used to calculate an index of biotic integrity, which is used to determine water quality from the macroinvertebrates sampled. Most sites rated as moderately to severely impaired for aquatic life during the assessments. Overall, the macroinvertebrate communities reflect the elevated nutrient and E. coli concentrations and relatively poor habitat present throughout the watershed. Mitigation activities identified in the plan to improve biotic communities include restoring and managing stream bank and riparian habitat to reduce erosion, restoring natural hydrology, increasing turbulence and reducing water temperatures, and working with departments of transportation to reduce road salt impacts.

Conductivity: Conductivity is a measure of the ability of water to pass an electrical current and is useful as a general measure of water quality. Significant changes in conductivity indicate that a discharge or some other source of pollution has entered a stream. Conductivity measurements were relatively low at most sites throughout the watershed; however, several test sites exhibited conductivity concentrations in excess of the state standards during at least one sampling event.
Hydrologic Unit Code: 12

- Sagers Lake
  - 040400010301

- Clark Ditch
  - 040400010302

- Squirrel Creek
  - 040400010303

Salt Creek Land Use

- Emergent wetlands: 1,011 acres
- Woody wetlands: 2,723 acres
- Urban/recreational grasslands: 1,748 acres
- Small grains: 29 acres
- Row crops: 11,426 acres
- Pasture/hay: 8,663 acres
- Natural grasslands: 2,086 acres
- Mixed forest: 287 acres
- Evergreen forest: 3,496 acres
- Deciduous forest: 8,322 acres
- Commercial/transportation/industrial: 1,473 acres
- High intensity residential: 2,681 acres
- Low intensity residential: 4,696 acres
- Open water: 833 acres

National Land Cover Dataset, 2003

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