WDNR History: Perspectives on Water Quality

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CONSERVATION EVENTS

- 1870s
  - First fisheries programs

- 1880s
  - First wardens authorized & hired

- 1890s to 1900s
  - Forestry programs established

- 1901
  - First state park (Interstate)
CONSERVATION EVENTS

1915
- Conservation Commission created
- Forestry, fisheries, parks, etc. operated as individual departments.

1927
- Wisconsin Conservation Dept. created

1934
- Conservation Congress formed
WATER QUALITY ISSUES - 1800s

- Lumber mills, slaughterhouses
- Deposits in streams
- Nuisances
- Health issues – sewage disposal
- State Board of Health in charge
WATER QUALITY ISSUES - EARLY 1900s

- **1905**
  - Increased prevalence of typhoid fever
  - Sewerage & water supply systems reviewed by State Board of Health
  - No appropriation for doing the work

- **1919**
  - 1st water pollution control legislation
EVENTS - 1925

- Milwaukee builds first large activated sludge treatment plant in US
- Flambeau River fish kill
- Reports on water pollution in Wisconsin published
EVENTS - 1927

- Committee on Water Pollution (CWP) (Conservation Dept., Board of Health, Railroad Comm.)
- No funding
- Basin investigations instituted
- Industrial waste evaluations
- BOH retained sewage disposal activities
EVENTS – 1930s to 1940s

- **1931**
  - First CWP order issued

- **1930s**
  - Depression – Works Progress Admin. builds sewage treatment facilities

- **1940s**
  - Not so much
FIRST FEDERAL WPCA

1948 – 1st Federal Water Pollution Control Act

- Financial assistance
- U.S. Surgeon General in charge
- States are primarily responsible
- Address interstate issues in cooperation with states
- Address nuisances
CWP - EARLY ACTIVITIES

1950

- Ted Wisniewski appointed 1st Director of CWP (also last)
- Basin surveys & orders (continued until 1972)
- Pulp & paper mill surveys
- Coop. river surveys with paper industry
- CWP = industry oversight
- BOH = sewage system oversight
1950s to 1960s

- 1952 - Madison Metropolitan Sewerage District diversion to Badfish Creek
- 1965 – WPCA amended
  - Fed. Water Pollution Control Admin. created
  - Enhanced grants
  - Req’d states to adopt water quality standards for interstate waters
1960s

- 1965 – Major revision to state stats. (Ch. 144)
  - State gov’t reorganization (DRD)
  - Expanded authority for state oversight
  - Established state grant program for sewerage systems
  - Required water quality stds. all state waters
  - Shoreland/floodplain zoning
  - Biodegradable detergents req’d.
1960s

1966

- Milw. Journal series on water pollution
- Merger of agency functions into Dept of Resource Development (CWP, BOH, PSC, etc.)

1967 – WQS for interstate waters
1960s to 1970s

- 1968 – WDNR created (DRD + Cons. Dept.)
- 1968 – WQS for intrastate waters
- Great Lakes Enforcement Conferences
  - Phosphorus, Thermal
  - Reserve Mining – Lake Superior
- c1970 – First orders for phos. removal (GL basin only)
- C1972 – Fox (IL) basin phos. orders
1970s

- 1970 – Wyandotte - mercury discharge
- 1970 – DDT hearing/decision (1st in U.S.)
- c1970 – First TMDL orders issued to paper mills on Wisconsin River
CLEAN WATER ACT - 1972

- National goals & policies
- Grants for POTWs
- NPDES program
- Effluent guidelines (2ndary, BPT, BAT, pretrmt)
- Water quality criteria & standards
- 303(e) planning
- 208 planning
STATE PROGRAMS – 1970s

1972
- NR 101 program

1973 – WPDES program created in WI

1974 – U.S. EPA approves (1st in nation)
1970s

- 1973 – NR 104 WQ standards and discharge standards for small streams adopted
- 1974 – First WPDES permits issued for secondary treatment and BPT
- Mid-1970s – Ammonia & disinfection limits in permits
- Late 1970s – Wasteload allocations for Fox & Wis Rivers enacted (NR 212)
1970s - 1980s

- 1979 - 1982
  - Detergent phosphate ban
    - Phos. in detergents (early 60s - 11% to 12%; mid 60s – 8.7%; mid 70s – 5.5%)
    - Phos. in untreated sewage (pre-ban – 7 to 9 mg/L; post ban – 4-5 mg/L)

- 1983
  - WDNR claims 1st state with secondary trtmt for POTWs, BPT for industry
1980s

- 1983 – Groundwater standards law
- 1986 – First compliance maintenance rule
- 1987 – CWA changes
  - Toxics, Nonpoint, Stormwater, Biosolids
- 1989 – WDNR toxic WQ stds & effluent limit procedures (NR 105 & 106)
- 1989 – Antidegradation rule (NR 207)
1990s

- 1991 – Wetland water quality standards
- 1993 – NR 217; phosphorus removal statewide
2000s

- 2002 – NR 206; compl maint rule update
- 2010 – Phosphorus water quality standards; implementation procedures
- 2010 – Thermal water quality standards revised
THANK YOU!