

Aquatic Invasive Species: Current State Monitoring and Future Opportunities

By

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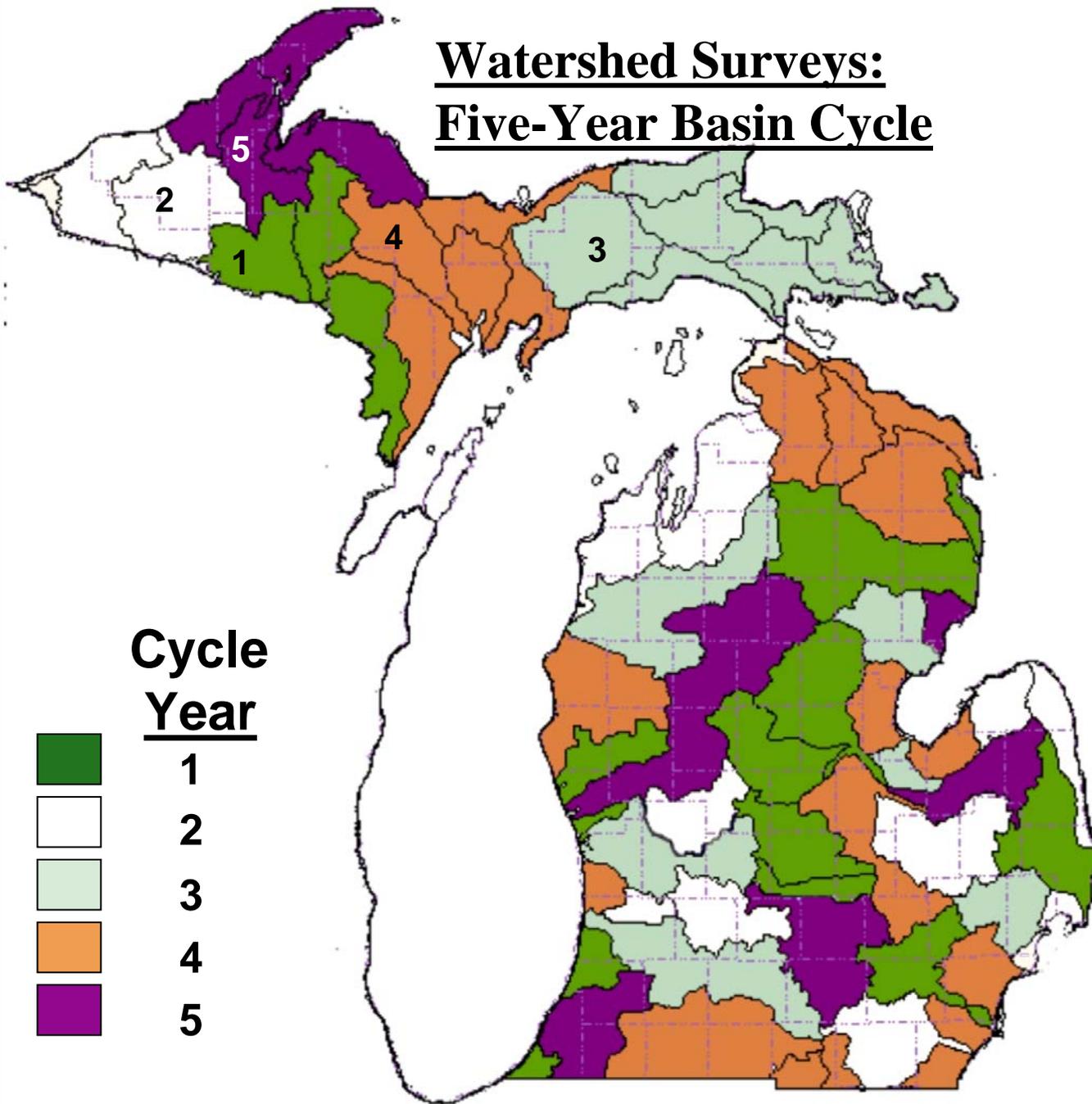
MDEQ – Water Bureau

March 5, 2008

Current State Monitoring Activities

- DEQ/DNR Surveys
- Water Quality Monitoring Grants
- Volunteer Water Quality Monitoring
- Anglers Monitoring Network
- Case Study: Hydrilla Early Detection

Watershed Surveys: Five-Year Basin Cycle



DEQ/DNR Surveys

- Staff record presence of invasive species
 - Benthic invertebrates (DEQ)
 - Fish (DEQ, DNR)
 - Aquatic Plants (DEQ)
- ID training spotty
- Not really a point of emphasis to date

Water Quality Monitoring Grants

- Local monitoring (\$150,000/yr)
- Emerging issue monitoring (\$150,000/yr)
- Previous projects include monitoring for invasives in Marquette Harbor; mussel distribution; purple loosestrife near Portage Creek; and toxic algae (Microcystin)

Volunteer Monitoring

- Streams/rivers
 - benthic macroinvertebrates
- Inland lakes
 - aquatic plants
- Grants, training, QA/QC
- Not focused on invasive species

Angler's Monitoring Network

- 1.3 Million Anglers
- Report un-identified fish to a DNR Operations Service Center
- Web site information on invasive species identification and life histories
- Includes species not yet known to be in Michigan

Hydrilla Early Detection

- Hydrilla case study developed in 2006
- Boaters/anglers can report suspected hydrilla through postcard mailings to MI Sea Grant
- Other entities may find hydrilla incidentally and can report it to the MDEQ

Future Opportunities

- Based on Hydrilla case study and Lake Michigan Pilot Project
- Develop priority invasive species list
- Identify high-risk waters or pathways for routine/targeted monitoring
- Training for professionals and volunteers
- Establish consistent sampling protocols

Future Opportunities (cont.)

- Integrate into existing monitoring programs
- Develop a regional database to support mapping and reporting
- Reports should include trends and impacts as well as presence