

**Outcomes of the
Phosphorus Policy
Advisory Committee**

**Joe Rathbun
MDEQ – Water Bureau**

Committee's Charge

- Identify major sources
- Review voluntary & regulatory management approaches
- Develop findings & recommendations

Committee's Membership

Industry/Business

- Michigan Manufacturer's Association
- Agri-Business Association
- Soap & Detergent Association
- Chamber of Commerce
- Turfgrass Foundation

Associations

- MUCC
- MWEA
- NALMS
- SEMCOG
- Farm Bureau
- Assoc. for Local Public Health
- Michigan County Drain Commissioners

Committee's Membership

Public Groups

- Tip of the Mitt
- Huron River W.C.
- Mich. Environmental Council
- Chippewa-Ottawa Resource Authority

Consultants

- Public Sector Consultants
- Enviro Policy

State Agencies & Academia

- MDEQ
- MDNR
- MDA
- GVSU
- MSU
- UM

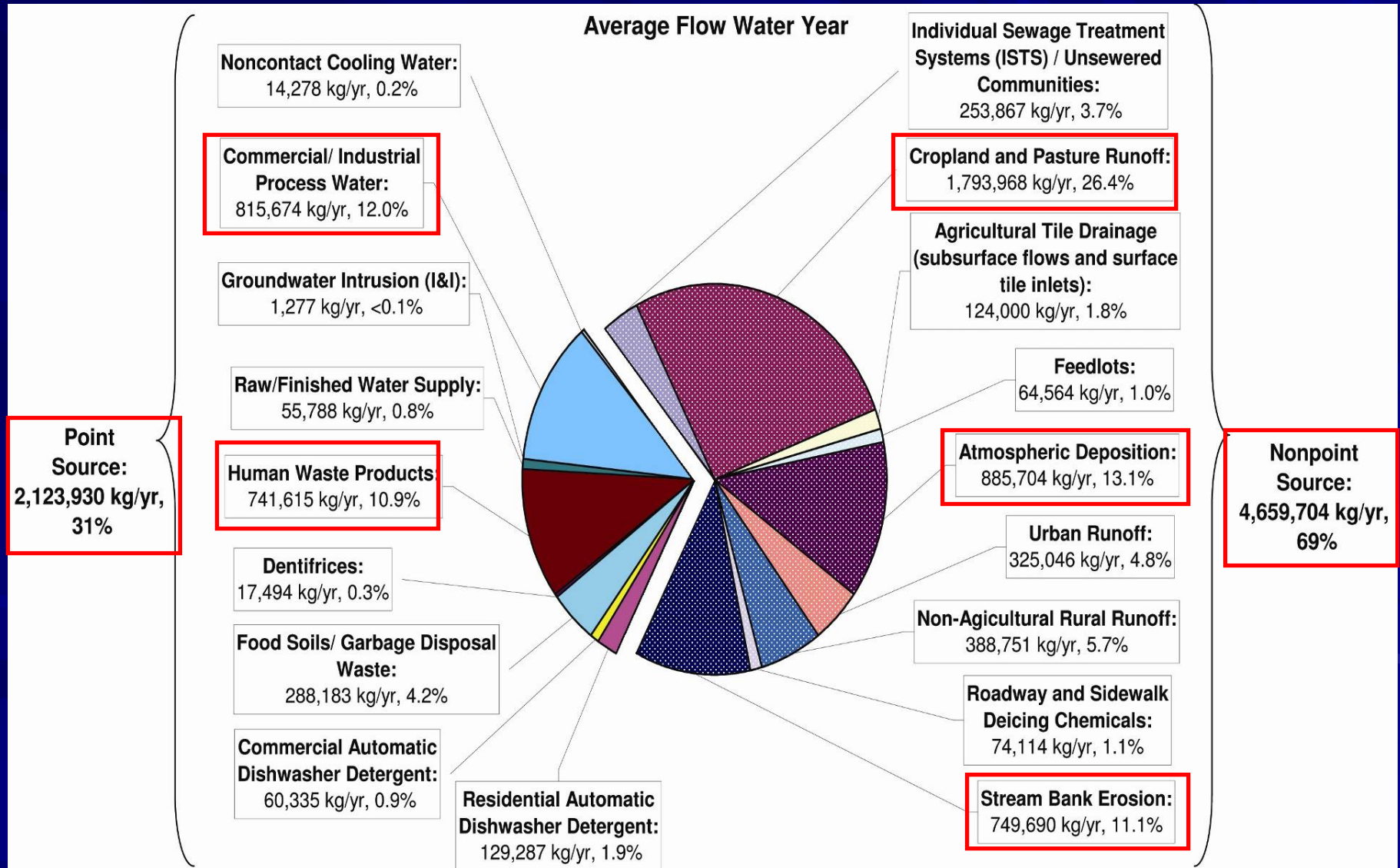
Committee's Schedule

- 6 meetings
- August 2006 through January 2007
- Issued final report March 2007

Presentations

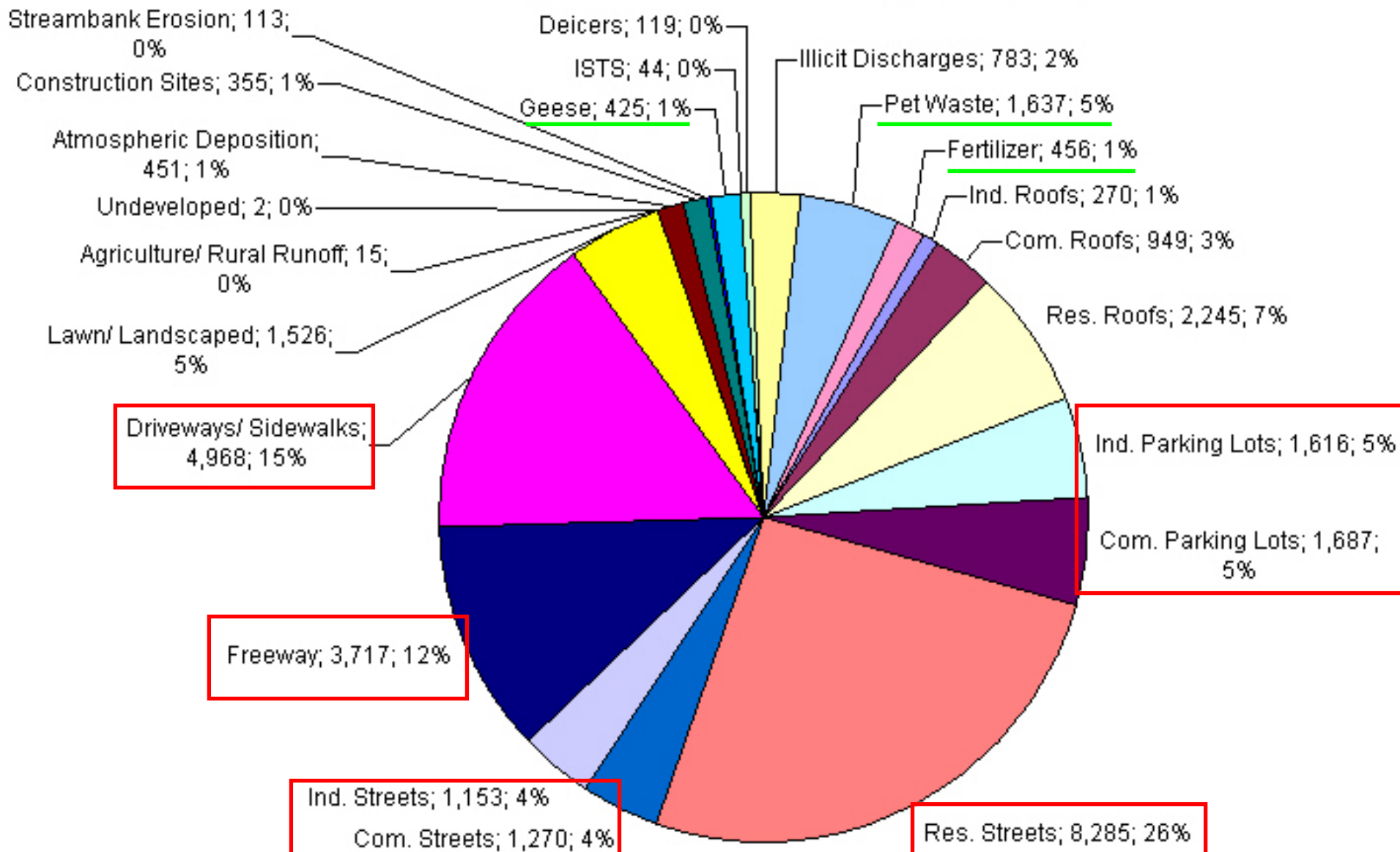
- **State of Minnesota & Barr Engineering**
- **Michigan State University**
- **Grand Valley State University**
- **Huron River Watershed Council**
- **MDA**
- **MDEQ**
- **Michigan Lakes & Streams Assoc.**
- **Procter & Gamble**
- **Kalamazoo River TMDL**

Minnesota – Point Sources vs. NPS



One Minneapolis Suburban Area

Average Year Source Loadings (lbs./year)



Minn. Recommendations for Suburban/Urban Areas

- **Five types of BMPs** are recommended to address more than 70% of the total source loadings
 - **Infiltration practices**
 - Filtration/biofiltration
 - **Disconnection from drainageway**
 - Pollution prevention/
good housekeeping
 - **Public education**



INFILTRATION —Before and After



Barr Engineering

Identified Sources - Michigan

- Point sources (WWTPs, CSOs, etc.)
- **Septic tank-tile fields**
- Urban storm water runoff
- **Stream bank erosion**
- Atmospheric deposition
- **Release from sediments**
- Agriculture
- **Misc. nonpoint sources**

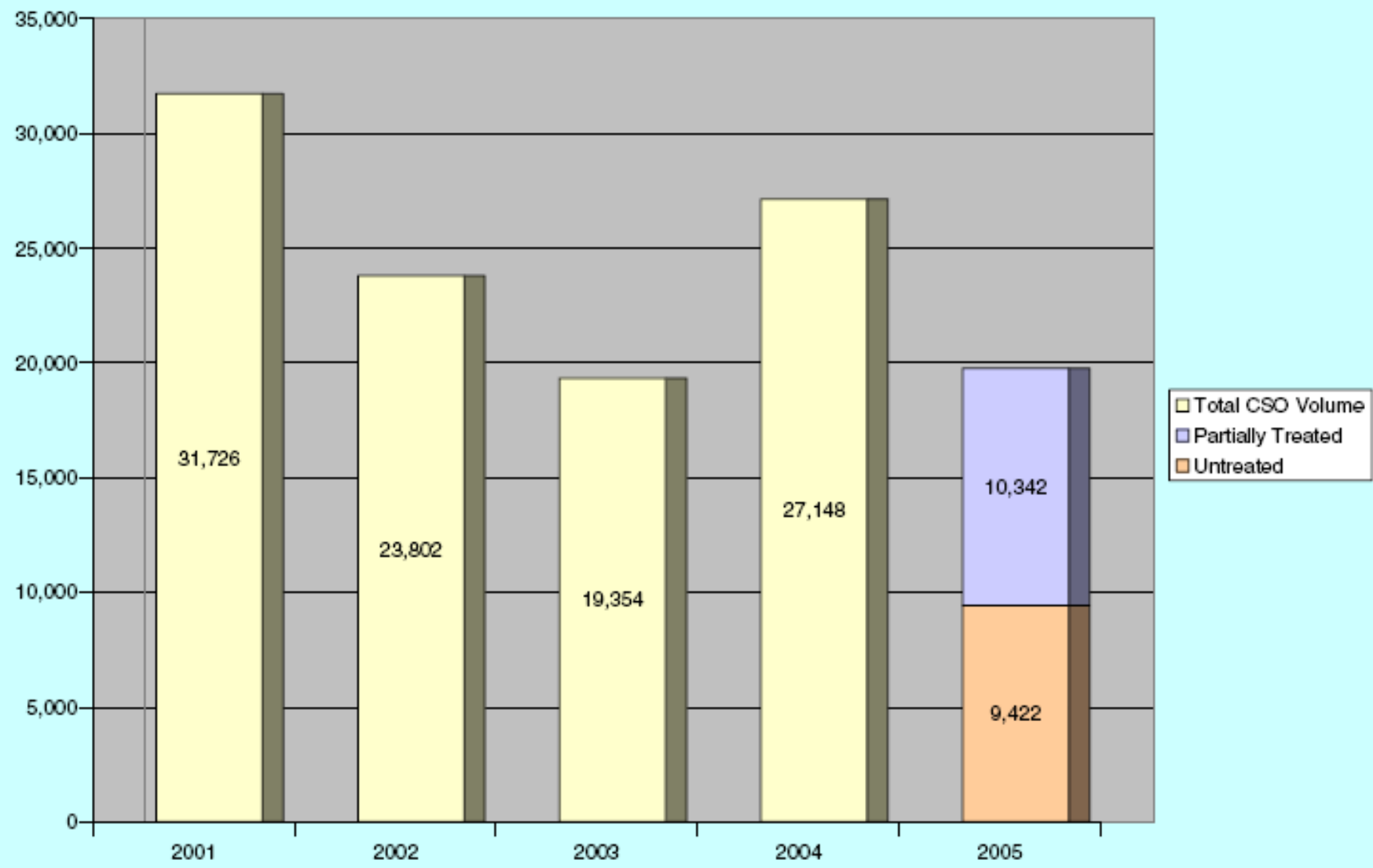


Figure 7: CSO Reported Volume (Million of Gallons)/Year

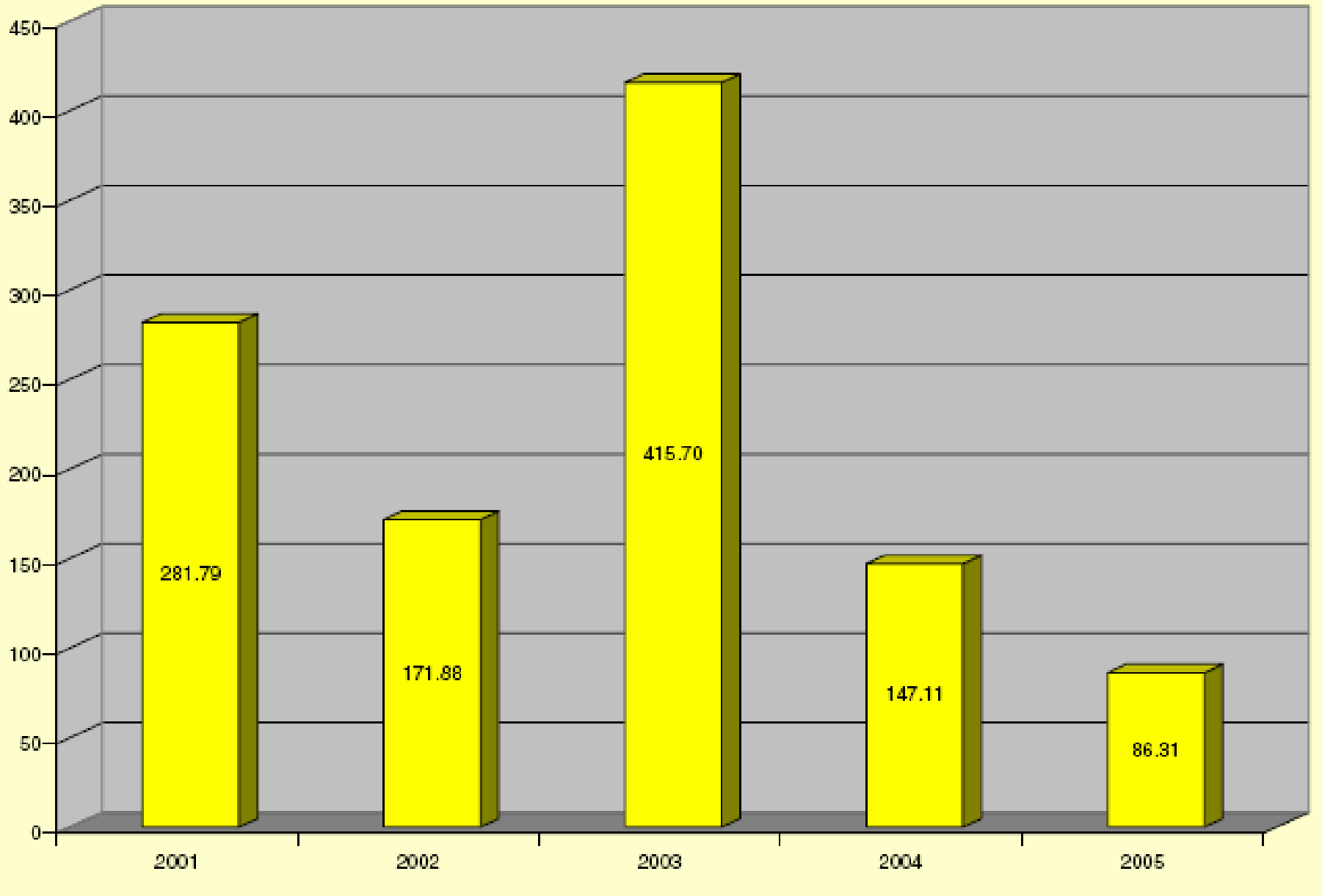


Figure 9: SSO Total Volume/Year (in Millions of Gallons)

Results – Findings & Recommendations (F&R)

9 Categories

1. Regulation (12 F&R)
2. Incentives & voluntary programs (4 F&R)
3. Product changes (4 F&R)
4. Education & technical assistance (3 F&R)
5. Community education (3 F&R)

Results – F&R (continued)

6. Funding (2 F&R)

7. Monitoring (2 F&R)

8. Landuse development (1 F&R)

9. Watershed associations (1 F&R)

1. Regulation

- Focus on NPS before further tightening point sources
- **Further reduce CSOs & SSOs**
- ID & preserve high-quality lakes
- **Statewide septic siting regulations**
- Regulate package plants
- **Tighten soil erosion program**
- Assess Phase I & II storm water program

1. Regulation (continued)

- Review biosolids & septage regs
- **Review CAFO regs**
- DEQ & MDA work with farmers to maximize conformance with ag best management practices

2. Incentives & Voluntary Programs

- **Expand CREP**
- **Kalamazoo, Grand, & St. Joseph**
- **\$30 M over 5 years = \$193 M federal money = 100,000 acres**
- **Increase time commitment**



2. Incentives & Voluntary Programs

- **Aim for 100% participation in Michigan Agriculture Environmental Assurance Program (MAEAP)**
- **Expand participation in Michigan Turfgrass Environmental Stewardship Program (MTESP)**
- **Fully utilize U.S. Farm Bill programs**
 - **EQIP, CREP, Wetland Reserve, Wildlife Habitat Incentives Program, etc.**

3. Product Changes

- Minimize inputs from improper lawn fertilizer use
- **Restrict dishwasher soap to 0.5% P**
- Examine road deicers
- **Re-use & recycle P-containing products**

4. Education & Technical Assistance

- **Minimize P losses from ag lands**
 - buffer strips, wind rows, cover crops to minimize **upland erosion**
 - proper tiling practices to minimize stream **bank erosion**
 - **wind erosion**

5. Community Education

- **Provide information for Michigan residents**
 - property owners
 - clearinghouse for gov't, businesses, etc.
 - K-12
- **Support lake associations**
- **Statewide education for households**

6. Funding

- **Streamline requirements for NPS projects under the State Revolving Fund (SRF)**
- **Change 319 to fund NPS projects in Phase I & II communities**
- **Special assessment districts**
- **Clarify through legislation when fees can be used to support storm water management**

7. Monitoring

- Expand water quality monitoring, integrating with local & volunteer monitoring programs
- Conduct statewide mass balance loading study



8. Landuse Development

- Improve landuse best management practices to reduce storm water runoff



9. Watershed Associations

- Enhance assistance to watershed associations
 - specifically noted the Kalamazoo as a model



Next Steps

- DEQ staff met **yesterday** to review recommendations and start formulating responses
 1. **In progress**
 2. **Support, and will do**
 3. **Support, but lack money / staff**
 4. **Don't support**

- **Nutrient criteria = April 2008**

Major Michigan Regulatory & Nonregulatory Initiatives

- Point source permitting
- **Urban runoff permitting**
- Laundry detergent restrictions
- **Agriculture regulatory programs**
- NPS grant programs
- **Agriculture stewardship programs**
- Watershed initiatives
- **MSU Extension, SEMCOG, etc.**
- Various monitoring programs

Link to Final Report

<http://www.deq.state.mi.us/documents/deq-wb-nps-phos-stakeholder-report.pdf>