

Why Do Monitoring Projects Succeed or Fail?

L.M. Reid. 2001. The epidemiology of monitoring. J. AWRA 37(4):815-820.

- **Design Problems**

- Problems are inherent in the plan
- No amount of hard work can salvage

- **Procedural Problems**

- Problems in execution sabotage good design

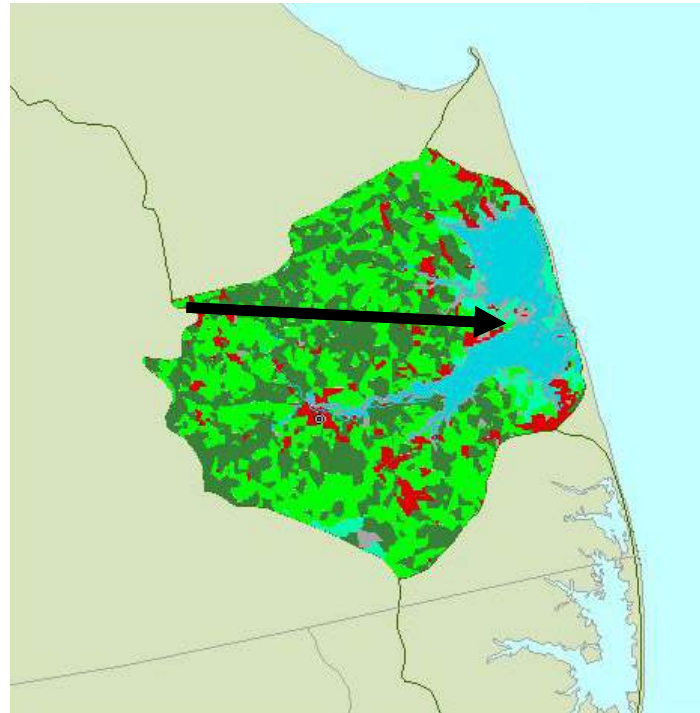
Top 12 reasons for failure - Design

1. Monitoring plan cannot measure what is needed



Top 12 reasons for failure - Design

2. Study too short



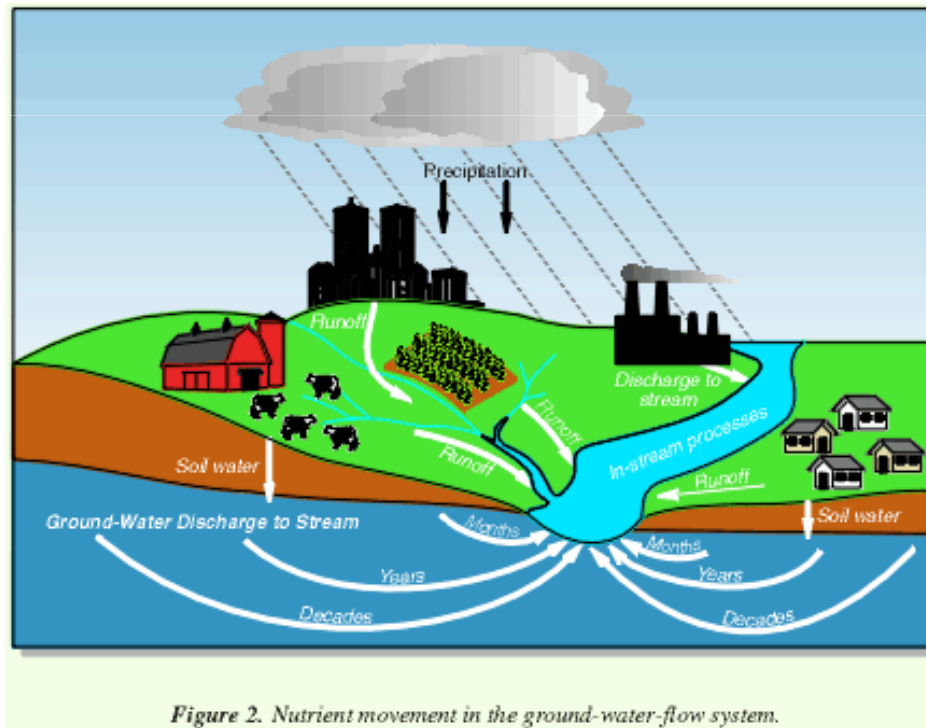
Top 12 reasons for failure - Design

3. Inadequate problem identification or analysis



Top 12 reasons for failure - Design

4. Fundamental misunderstanding of the system



Top 12 reasons for failure - Design

5. Statistically weak design

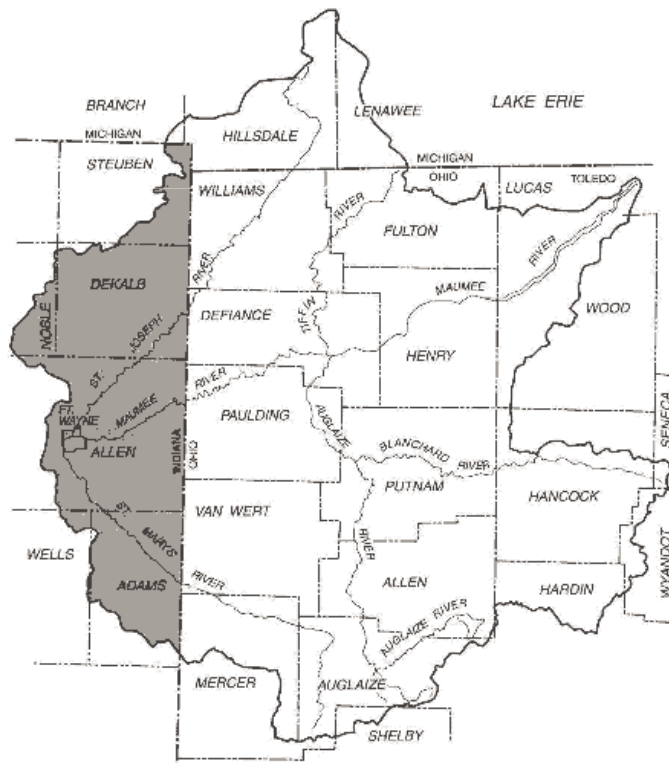
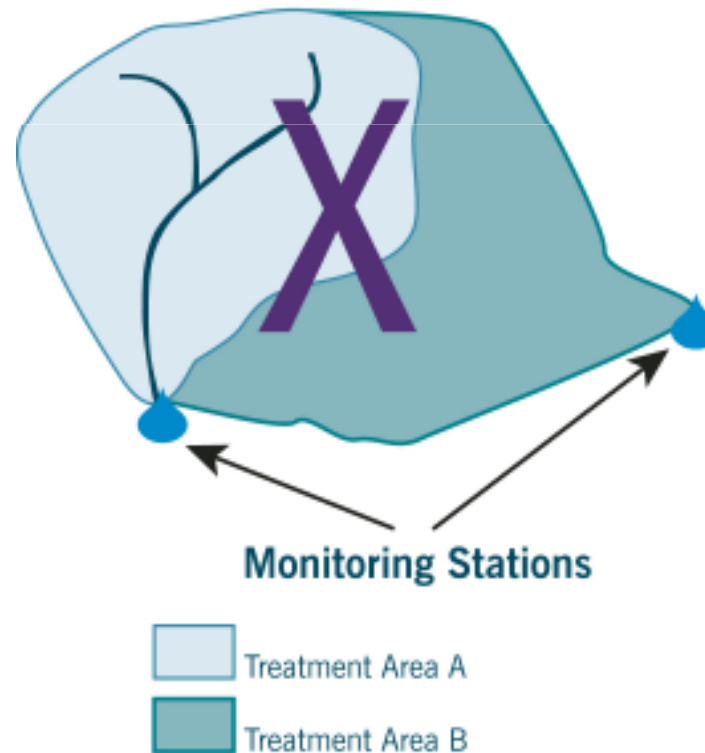


Figure 4. Location of Maumee River Basin

Side-by-Side Watersheds



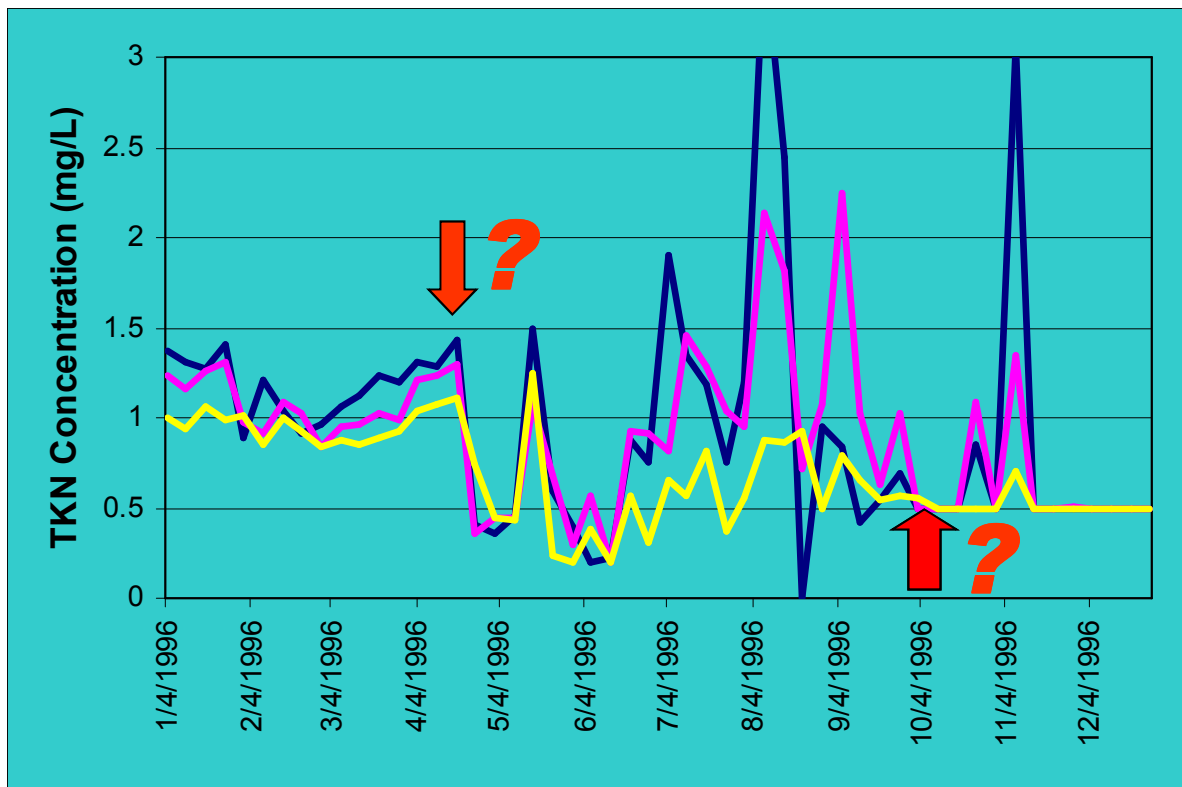
Top 12 reasons for failure - Procedural

6. Lack of training and/or enthusiasm in field staff



Top 12 reasons for failure – Procedural

7. Failure to evaluate data regularly



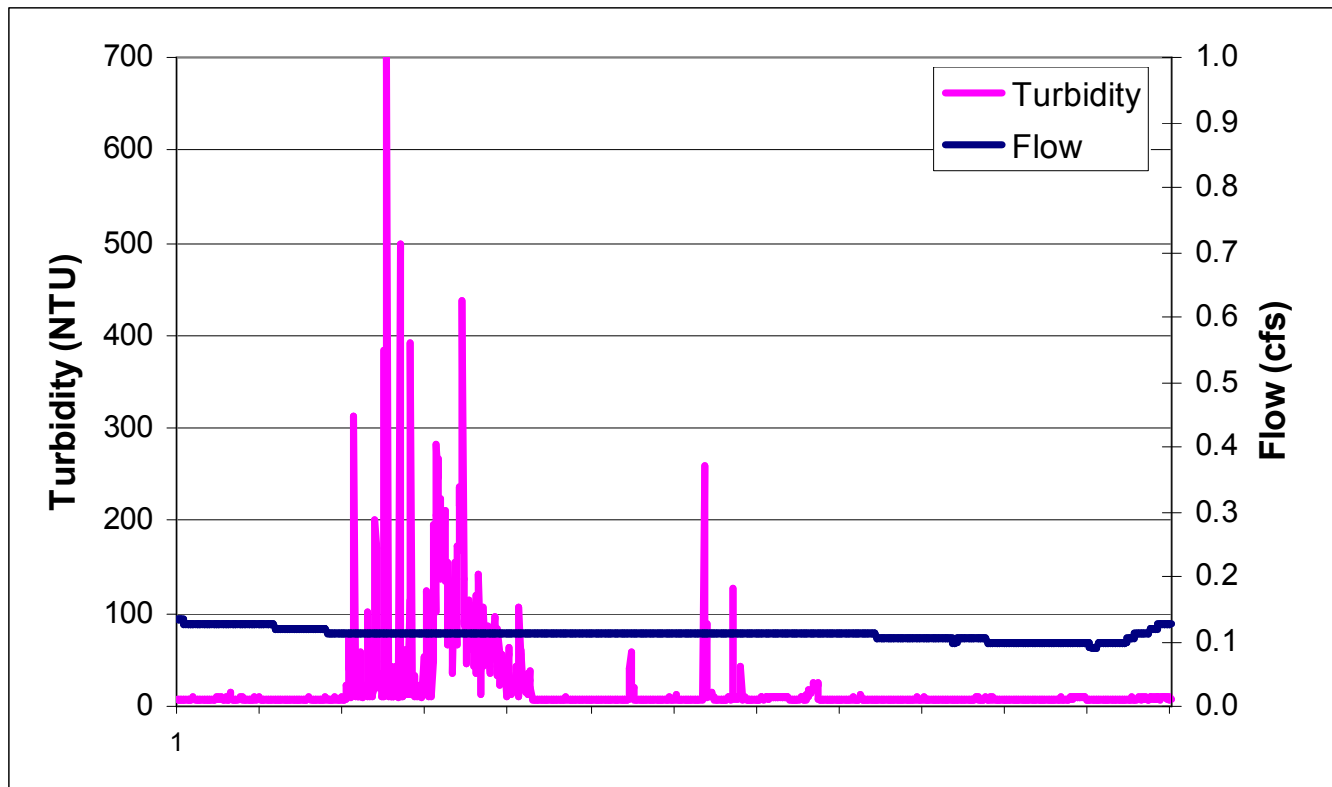
Top 12 reasons for failure - Procedural

8. Failure to collect collateral information



Top 12 reasons for failure - Procedural

9. Bad or misunderstood technology



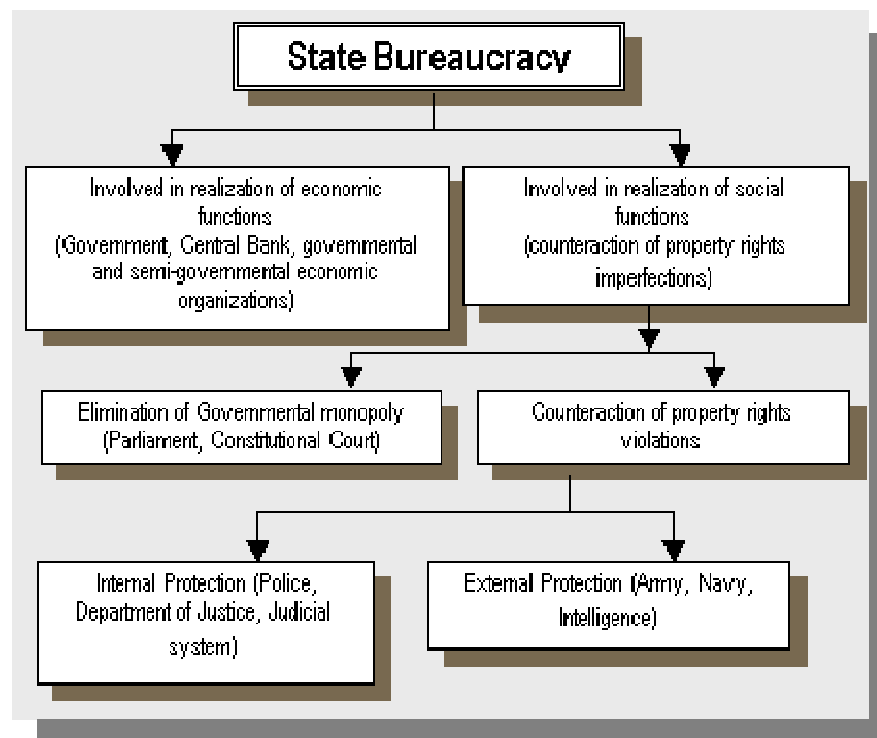
Top 12 reasons for failure - Procedural

10. Personnel change



Top 12 reasons for failure - Procedural

11. Lack of institutional integration



Top 12 reasons for failure - Procedural

12. Protocol changes



Top 12 reasons for failure

**Procedural problems can be addressed by training,
good management, and \$\$,**

but

design problems may doom a project from the start

Ingredients for success

**9 Key Elements addressed
satisfactorily**

Ingredients for success

- 1. Avoid causes of failure #1 – 12**
- 2. Accurate identification of pollutants and sources
→ *measure the right pollutant at the right time in the right place***
- 3. Small, focused effort (avoid large diverse watershed, gradual random implementation)**
- 4. Good monitoring design**

Ingredients for success

5. Attention to procedural issues

6. Strong, unified project leadership

7. Control over schedule of implementation

8. Effective tracking of land use and land treatment activities

Ingredients for success

- 9. Strong feedback between monitoring and implementation throughout the project**
- 10. Effective institutional coordination**
- 11. Priority and time given to effective evaluation, reporting and communication of project results**
- 12. Appropriate funding (amount & duration)**