

# **Lake Basin Management Initiative Regional Workshop for Europe, Central Asia & the Americas**

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## **Summary of Lessons Learned**

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### **We know enough to get started**

- Collectively, we have already reached a good understanding about the basics of successful lake basin management.
- What is needed is to apply that understanding.
- Enough is known to get started, but in some cases there is not sufficient motivation or will.

### **International borders complicate lake basin management**

- This is true both when an international border crosses a water body and when it crosses the watershed/lake basin. “Hidden” international water lakes include Baikal, which is entirely in Russia, but 70% of the water flowing in comes from Mongolia.
- The more countries that are in the basin, the more complex management becomes.

### **Waiting for crisis**

- In almost every case, concerted action for lake basins has been taken only after a sense of crisis has been reached.
  - Example: Cuyahoga River (Cleveland, Ohio, USA) caught fire in June 1969, led to EPA & Clean Water Act (CWA).
  - Example: Aral Sea is drying up, forcing international collaboration.
- This is true despite universal endorsement of the Precautionary Principle (Agenda 21) and evidence that prevention is more cost-effective than restoration.

### **Science & Technology**

- Application of science and technology produces very positive results in the early phases of “concerted action.”
  - Example: Municipal wastewater treatment plants reduce ambient phosphorus in lake basins.

### **Key scientific challenges**

- Translating science in ways that can increase public awareness and understanding.
- Relevance to public policy, law, and regulation (use by politicians) – also a translation issue, not really a relevance issue.
- Inter-disciplinary interface between the natural and social sciences.

### **Rich and poor countries**

- Differences between rich-country and poor-country lake basins are not as great as might be expected.
  - Example: 45% of lakes in USA are impaired for one or more designated uses.
- Effective involvement of citizens is essential but has been achieved at very few lakes.

### **Key problems are universal**

- The World Lake Vision identifies threats from within and outside lake basins.
- There are only a few basic *types* of threats, and they are universal.
- Global experience-sharing, such as through the Lake Basin Management Initiative, is helpful.

### **“GEF” vs “Non-GEF” lake basins**

- Global Environment Facility (GEF) support is important to help focus on institutions, but it has several limitations.
- Short-term, project funding, in some cases is poorly integrated with existing institution
- GEF focus on national governments may overlook local institutions which are important for creating and sustaining commitments.

### **Economic valuation**

- There is a crucial need to harmonize economic development, watershed management, and biodiversity conservation.
- Important to put a value on resources: economic, ecological, aesthetic, cultural, and social.
- This provides the basis for investment.

### **Lake biodiversity conservation**

- In general, biodiversity loss is poorly tackled; there is very little guidance on how to proceed.
- Activities often start at scientific rather than political institutions.
- Immediate crises often relate to water shortages.
- Many biodiversity initiatives focus only on the flora and fauna of a lake, rather than the basin as a whole (including rivers and wetlands).
- Integrated Water Resource Management (IWRM) must include ecological aspects.

### **Transboundary commissions**

- Transboundary commissions are crucial to facilitate and enforce agreements: identifying key problems through Transboundary Diagnostic Analysis (TDA) in the grant planning process; preparing strategic action plan (SAP); coordinating funding (example: TACIS in Russia & Finland); and building local support.
- It requires *decades* of effort to develop strong transboundary commissions- impossible in just a few years.

### **Land and water interactions**

- Wise management of land results in protection of the health of lakes.
- Control of *Point Source* pollution may be successfully addressed through engineering solutions.
- *Non Point Source* pollution is more difficult and requires: zoning and land use plans; changing management practices on the land (buffer zones are only one piece of what is needed); public environmental awareness; and behavioral changes in society.