# Capacity Building with Watershed Communities

USDA Natural Resources Conservation Service

- *Capacity building is the transfer of knowledge to increase awareness and participation in problem solving to empower action.*

# Methods of Capacity Building

Coordinated resource management planning process

Collaboration, building alliances and partnerships, working with partners through the whole process.

Consensus, getting the owners, managers, and users involved in the decision making process.


Ngerikiil Watershed
Airai State, Palau

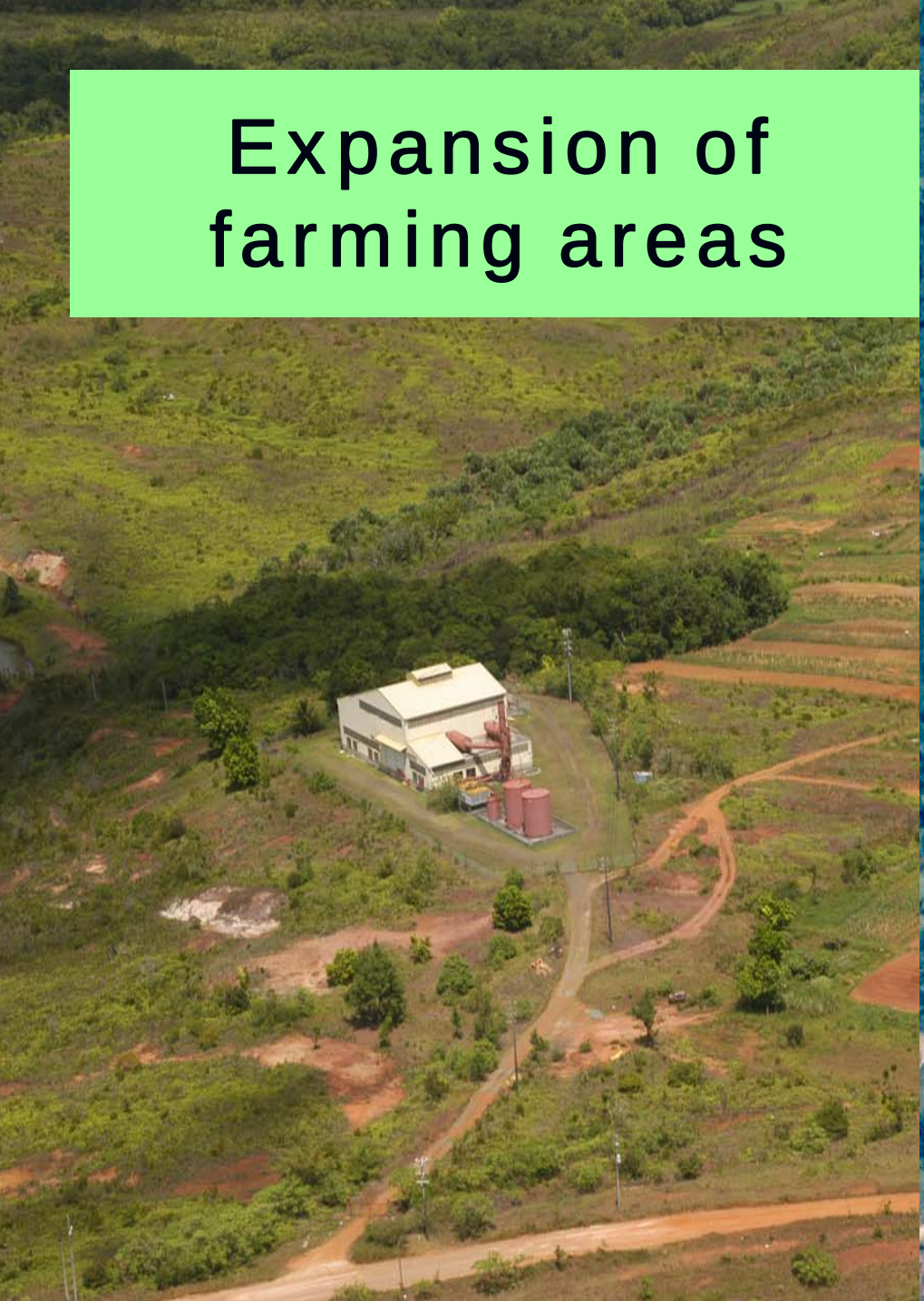
# Primary Water Source for Koror and Airai

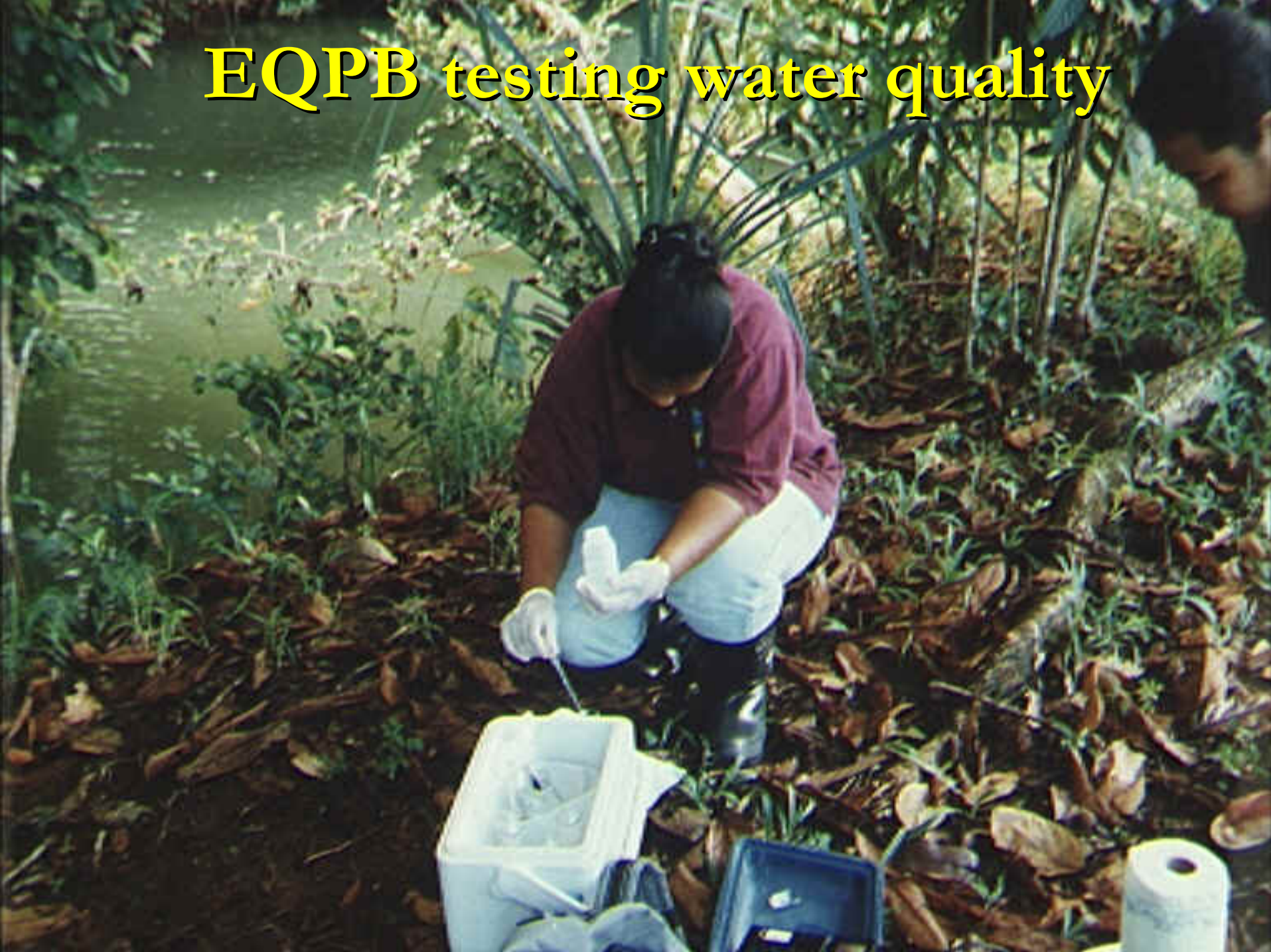
**Ngerikiil Dam**

**(1985)**

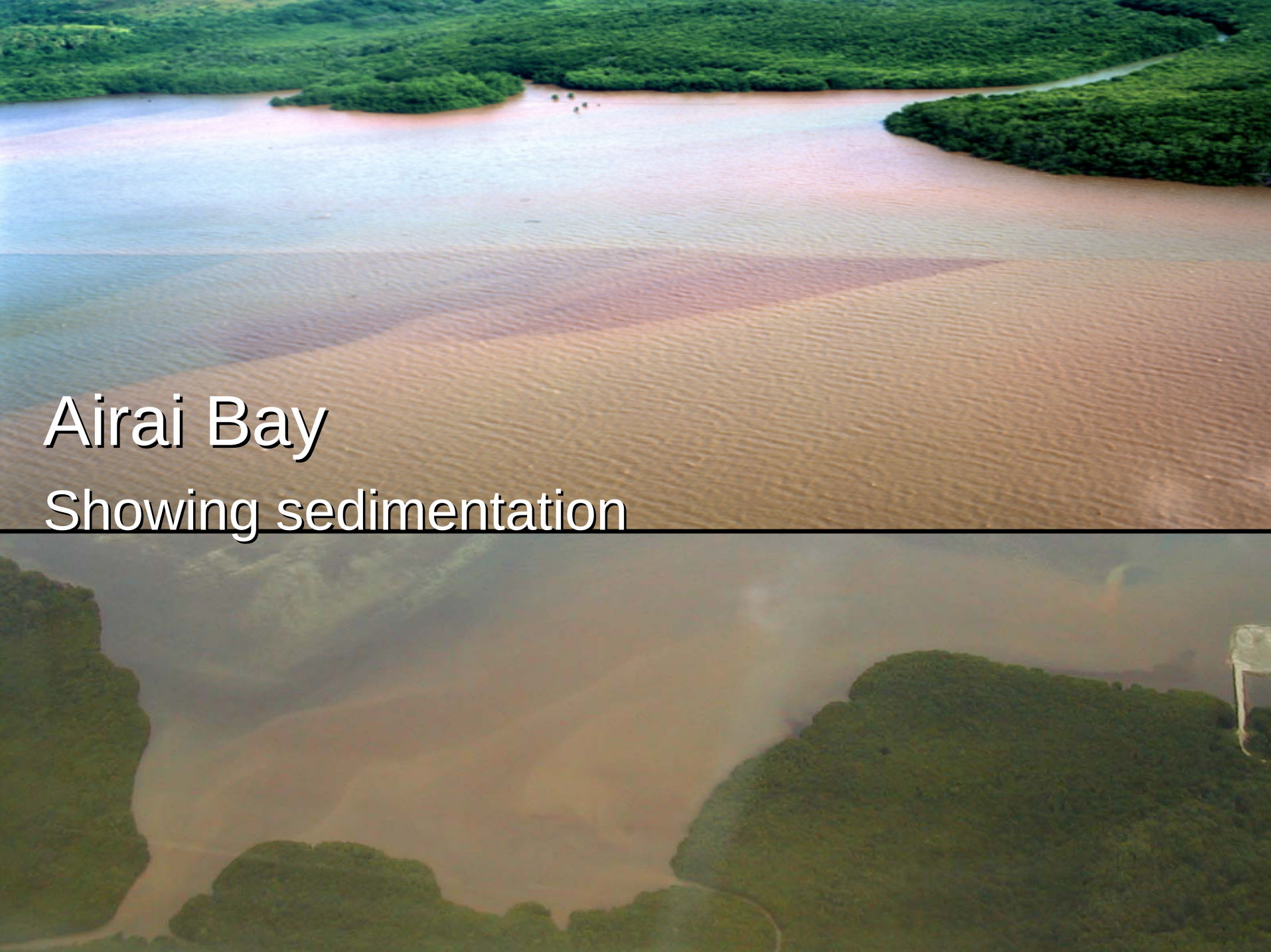
# Development increasing in Ngerikiil Watershed

# Expansion of farming areas



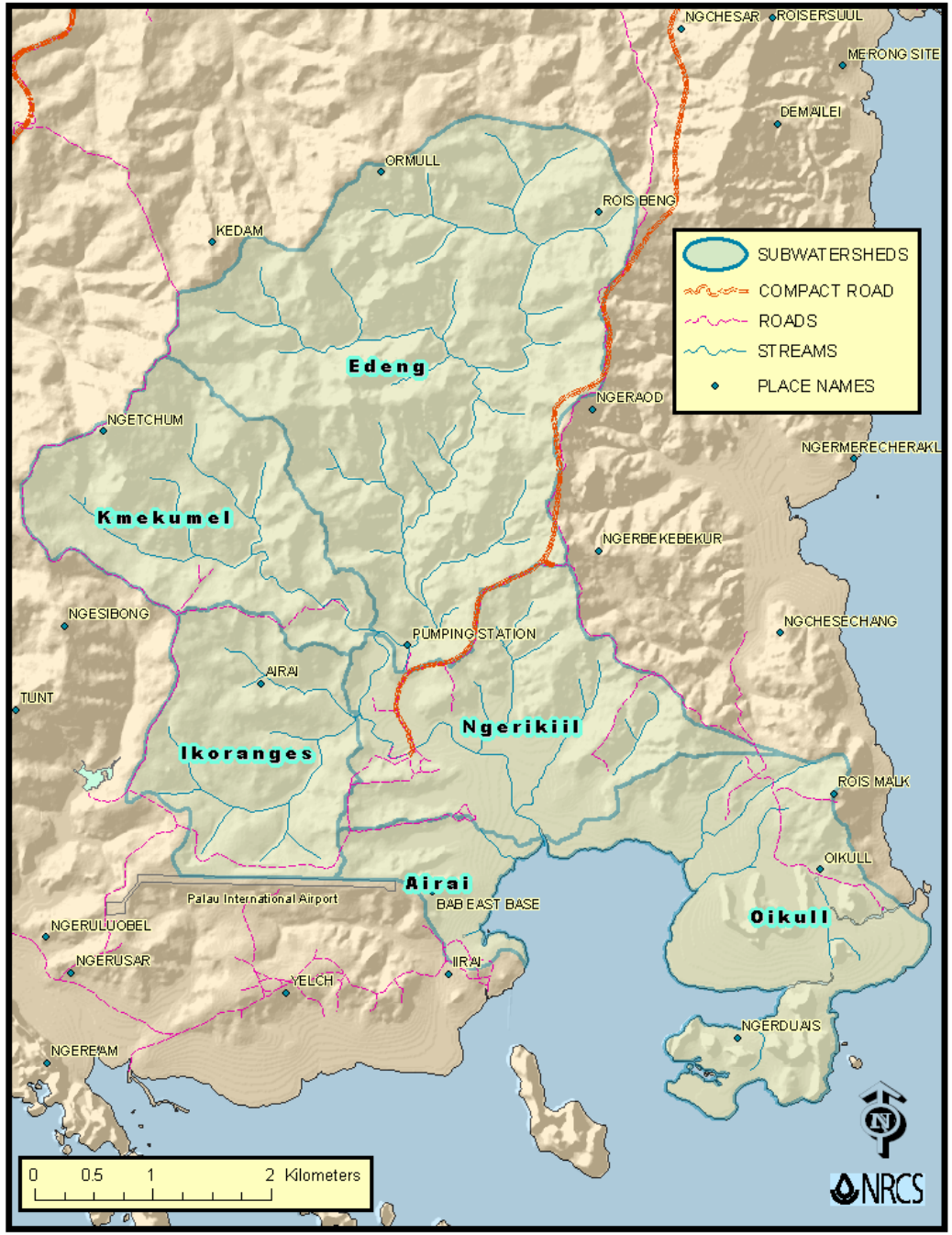

EQPB testing water quality

# Palau Natural Resource Council


Airai Bay
Showing sedimentation

Ngerikiil Watershed
Area = 28.5 km$^2$

3 tributaries flow into Ngerikiil that drains into Airai Bay, 3 km$^2$



# Watershed planning process

- Identify the goals or objective
- Inventory resources, analysis inventory data to id problems
- Develop solutions or alternatives, and evaluate alternatives
- Make decisions and implement solutions

# Capacity Building part of every step of the planning process

Increase awareness of resource relationships and interactions

To build consensus in the recommendations to address natural resource concerns

To achieve social change, or implementation of solutions

# Community Action

## Airai Working Group and Partners

**Road construction and unpaved roads cause estimated maximum erosion of 488 tons/acre/year**

**Non-traditional farming creates an estimated maximum erosion of 325 tons/acre/year**


Burning savannas creates an estimated
maximum erosion of 98 tons/acre/year

**Construction sites produce an estimated maximum erosion of 77 tons/acre/year**


Declining water quality


Degraded soil


Serious damage to reefs in Airai Bay


Declining fish and invertebrates

# Ngerikiil watershed process

- Completed the resources inventory
- Analysis of the resource data
- Formulation of alternatives started
- Implementation in a few areas
  - Sustainable farming
  - Riparian Buffer


Agroforestry


Low till, grass and fruit trees


Sunhemp


Mulching and grass cover


Riparian Forest Revegetation
Community Tree Planting


Governor Rengulbai,
planting a tree

# Main Outcomes of Capacity Building

Stakeholders participated in process, and have confidence in the outcome

Interest in and understanding of the problems has been increased

Local groups and stakeholders take more responsibility for managing their resources

# Next Steps for the Ngerikiil Watershed

- Use the results of the resource inventory to
- Formulate workable alternatives to solve all of the erosion and sedimentation problems
- Implement the solutions to address the problems


# Priority capacity needs

- Scientific data


Capacity Building in
Conservation Planning
or Land Use Planning

# Actions Needed

- Funding
- Land Use Planning