## Workshop

## Defining Reference Conditions of transitional water in the Mediterranean and Black Sea EcoRegions

1-2 June 2006

Kavala, Greece

On 1-2 June 2006 within the TWreferencenet CADSES project framework a workshop will be organized in Kavala, Grecce in order to link theory of dynamic systems with empirical investigations from transitional waters (TWs). The goal of this workshop is to incorporate the dynamic regime concept in ecosystem assessment and restoration of TWs. In the workshop the following topics/questions will be addressed:

- State of the art in the theory of dynamic ecological systems.
- Do alternative regimes in transitional waters exit? If yes, do the reference and degraded conditions represent examples of alternative dynamic regimes?
- Possible methodologies to identify regimes and regime shifts in TWs and un marine ecosystems in general.
- Which restoration strategy should be developed to restore the good water quality in the degraded TWs?

## **Background**

Human well- fare depends on the structure and function of the ecosystems. Thus, it is critical to know the ecological status and the restoration possibilities of the degraded ecosystems, especially for the sensitive and high valued ecosystems, like transitional waters (TWs).

Several studies in terrestrial and aquatic ecosystems indicated that ecosystems may undergo sudden dramatic shifts from one state (regime) into another, if a critical threshold known as "catastrophic bifurcation" is passed. Since the new state may generate less valuable ecosystems goods and services, such regime shifts may have dramatic consequences for the society. Any restoration effort to the primarily regime may show resilience requiring drastic and expensive intervention.

Key issues in the protection and the sustainable management of TWs is the assessment of anthropogenic impact and the restoration of the degraded systems to historical less disturbed regimes (reference conditions).

## **Organizers:**

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