* **Alon Tal**, co-founder of Arava Institute For Environmental Studies at Ben Gurion University--a research institute, and author of Wisdom: Preparing the Groundwork for Cooperative and Sustainable Water Management in the Middle East (2010).
* Year of biodiversity (declared by the UN)
  + Noah’s ark
  + there used to be tremendous amount of biodiversity in the region, now no longer there.
    - ie Wild Ass, now extinct.
    - Israel’s attempts to bring back extinct animals(written about in the bible).
    - Peace treaty bet Jordan and Israel🡪 hybrid of govt and NGO.
      * Coordinates to protect environment.
* Remarkable Common Natural History/ Heritage
  + Species
  + potential in terms of natural resources.
* Pervasive water scarcity
  + 20mm of rain per year to +800mm of rain.
  + steep rain gradients
  + species have to adapt to those circumstances.
* Growth in Population
  + Very crowded bet Jordan river and Mediterranean sea.
* Change in lands
  + Bible: Forests etc and Now: deforestation and dry lands.
  + Potential for desertification.
* Milk and Honey🡪 Pollution and Toxics
  + 2-3% increase per year in electricity consumption
  + increase in demand for energy, number of cars, greenhouse gases.
  + Air pollution worse in Palestine b/c of older cars.
  + Water quality challenges
    - who controls the water aquifer?
      * who cares if the water quality sucks
    - projected increase of 5 m in sea level.
    - drop in rainfall🡪 less water available.
    - new hydrological equilibrium.
    - lowest levels in sea of Galialee
* Gulf War- 1991
  + Sadam Hussain invades Kuwait
  + Bush tries to stop him, Hussain intentionally floods part of the Arabian peninsula with oil.
  + Prince Hassan of Jordan wants to know potential emergency response plan in the gulf of Acaba.
    - The gulf involves Israel and Jordan
      * Regional strategy talks to move peace forward.
      * James Baker- Madrid Peace Talks.
        + Multi-lateral working groups
        + economic development
        + refugees
        + arms control
        + water

“waste of time” bet Israel and Palestine

* + - * + environment

actual talks, working together

Emergency response plan

Bahrain

* + - * + CBM's
      * Bi-lateral Talks
        + Fruitless attempt
        + interim agreement

Joint Water Committee

To create management and enforcement

* + - * Environmental Paradox of Peace: Transportation
        + Brand new airport
        + Cross Israel Highway
        + not environmentally sustainable.
      * Pollution Migrates
        + Israel makes 10times more than Palestinians.
        + hard to negotiate because different economics
      * Infrastructure
        + Would be much more efficient to share ports etc.

Didn’t happen.

* + - * September 2000- the Intifadah Erupts
        + Turning back the clock, not much has happened since then.
      * 2010- Environmental Cooperation A New Lease on Life?
* **Obstacles to Environmental Cooperation**
  + Different socio-economic realities
    - Motto: west vs. east Germany
      * Single set of standards- but no set time to achieve this
  + Lack of Prioritization on both sides.
    - Politics!
    - environmental issues don’t take priority
  + Enmity: The past is the enemy of the future
    - Mental block
  + Environmental resources
* Models for transboundary environmental management
  + Separate
  + coordinated
  + joint
  + delegated responsibility to outside body
* Saving Eilat- A Regional Challenge
  + Dying reef
    - Coral reefs dying rapidly
* The Gulf of Aqaba
  + A full menu of hazards
* Transboundary air pollution
  + Wind blows from Israel to Palestine and inland
  + European standards
* 1,110 Premature deaths
* Rivers turning into sewage conduits
  + Alexander River
  + River restoration
    - “share or fail”
* Scarcity is no longer available
  + Desalination: end of scarcity?
    - $.50- 1,000 L f water
    - takes up beach space
    - use of chemicals
    - phosphates/ boron control.
    - cumulative impacts of brine
* Dead Sea
  + Lowest sea of earth
  + 10 times saltier than normal.
  + shrinking
  + Israel and Jordan have used water from the Jordan river
    - Sink holes!
    - Red-Dead canal proposed pipeline
* No real standards for animal protection
* Bird migration and habitat protection
  + Syro-African rift
* Intentional arson
  + Expression of nationalism
* Greening the Drylands
* Optimism: Mediterranean
  + after 15 years since the major sea treaty🡪 less tar in the sea
  + NGOs
    - Civil Society steps up!
    - Arava Institute for environmental studies
* Trend is not destiny!!!
* Water rights vs Water needs!