

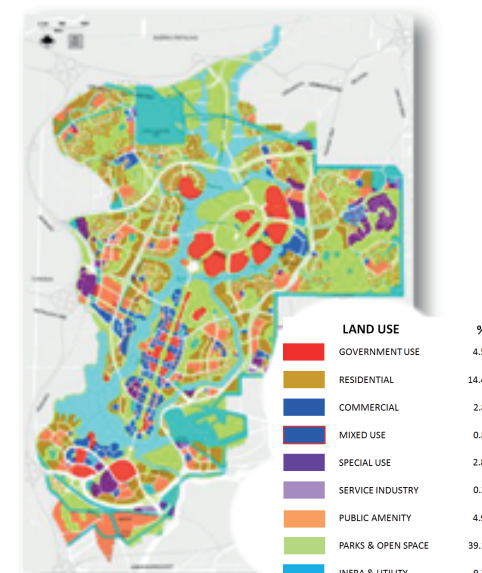
## Demosite description

### Lithology / Geochemistry

Calc-silicate hornfels, granite, carbonaceous schist and quartz-mica schist.  
Thinly bedded meta-siltstone and meta-sandstone



2°94'N, 101°68'E



Putrajaya Corporation, 2012

## Main description:

- Putrajaya Lake and wetland catchment (fig.1) are located in Putrajaya Federal Territory within the Langat River Basin area in Malaysia. The lake is at the southern part of the wetland.
- Putrajaya Lake (fig.2) is an urban lake in which its foreshores are the most popular resource for informal recreation as a waterfront city.
- Putrajaya Eco-hydrology Management won the **Excellent Award in the Green City Award** Category of the Malaysia Landscape Architecture Awards (MLAA) 2012 and a **Gold Award of The International Awards for Liveable Communities 2012**.

Conserve Ecohydrological processes in natural ecosystems

✗ NO

Enhance Ecohydrological processes in novel ecosystems

✓ YES

Apply complementary Ecohydrological processes in high impacted systems

✓ YES

## Ecohydrology Principles and Solutions

**EH IMPLEMENTATION PRINCIPLES**

\* Ecological engineering

## EH SOLUTIONS

Plantation of a variety of aquatic plants in this wetland (more than 70 species totaling 12 million number of plants)



The Putrajaya constructed wetland system (implemented since 1998) comprises five arms with 24 cells



## Lifezones

Life Zone  
Tropical Moist Forest

PPT (mm/yr) 2307

T (°C) 27

PET ratio: 0.69  
Elevation: 50m  
Humidity: humid

Fig.1- Aerial view of the series of wetland cells with different reed bed vegetation (Courtesy of Putrajaya Corporation)

## Major Issues

\* Elevated level of pollutants from upstream inflow to the lake

## Social-Ecohydrological System

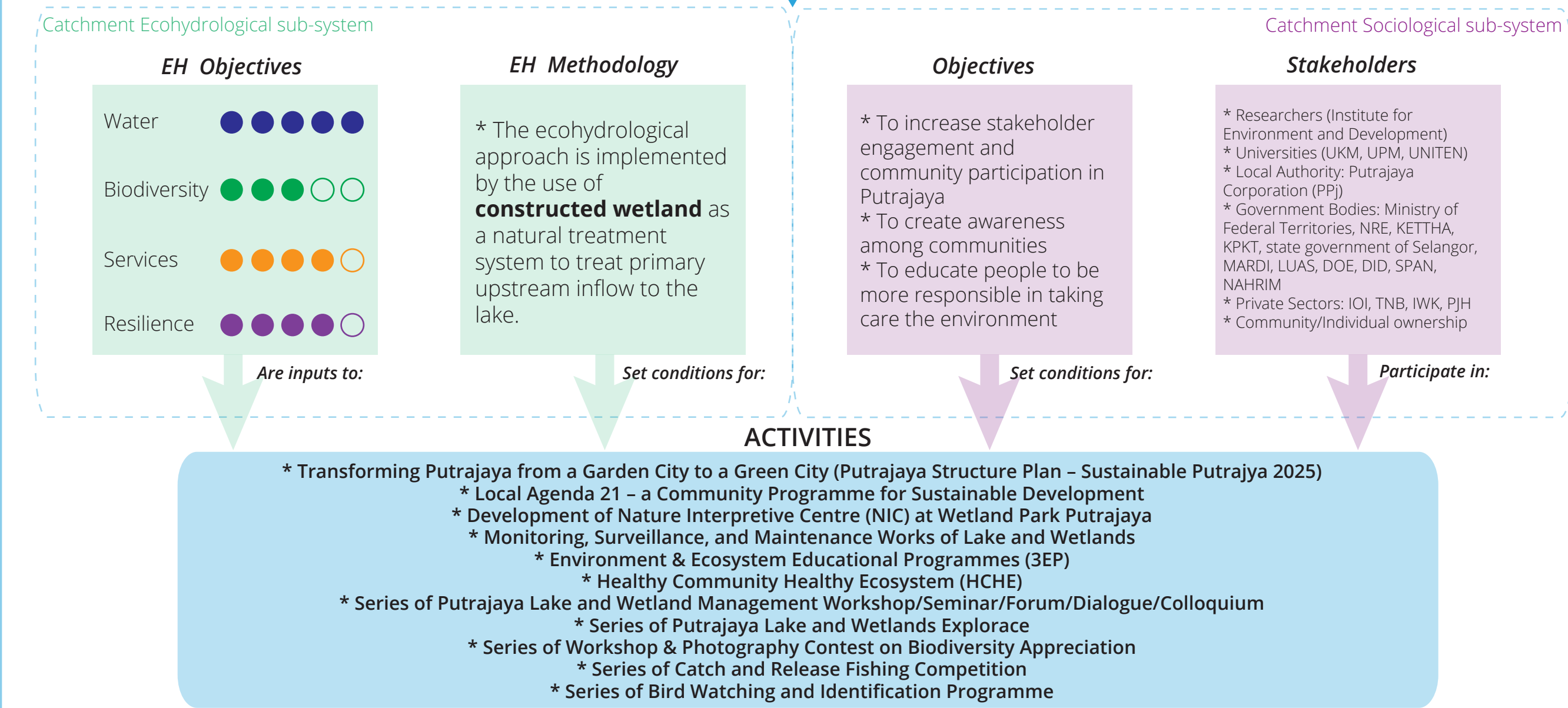


Fig.2-Putrajaya Lake (courtesy of R. Elfithri)

## Results

### MAIN EXPECTED OUTCOME

Improvement of the water quality of the surface runoffs flowing into the lake from the upstream areas

### LATEST RESULTS

The ecohydrological approach that combining the need of the ecosystem into the overall planning, approval, monitoring and enforcement jurisdiction of the city development and the human activities in this catchment area, significantly having a **direct impact to the Putrajaya Lake**. A number of monitoring and surveillance conducted in this area has shown very **positive signs of interesting habitat development and ecosystem enhancement**. Water quality is remained in good water quality for allowing water related activities conducted in the lake.

[CLICK HERE TO SEE THE REFERENCES](#)



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