

## **POLICY ON THE USE OF WATER FOR MAINTENANCE OF TURFGRASSES IN GOLF COURSES**

### **BACKGROUND:**

Golf courses have been identified as users of large amount of water. The intensive use of water by the booming golf course industry has adverse impacts on water resources which includes groundwater pollution and water scarcity such that during period of droughts and water use restrictions, irrigation of golf courses competes with other water uses like domestic and industrial purposes. It should be emphasized that during water shortages, it is explicitly provided for under the provision of the Water Code of the Philippines that the use of water for domestic and municipal purposes shall have a better right over all other uses. Under article 10 of the Code, utilization of water for golf courses falls under the category of “use of water for recreational purposes”.

In view of the foregoing, policies on water allocation for golf courses have to be developed to minimize its adverse impacts on water resources. To this end, the staff conducted a review on the existing NWRB policies being implemented as well as research have been made to determine the amount of water being utilized for the irrigation of golf courses in other countries and the best management practices on water conservation.

A draft policy was prepared and internal as well as external consultations were conducted to gather comments/ suggestions on the proposed policy.

### **PROPOSED POLICY:**

Based from the results of researches, computations, consultations and comments received, the proposed policies on the use of water for maintenance of turfgrasses in golf courses for adoption are as follows:

1. In the computation of water allocation for the maintenance of turf grasses in golf courses, the water duty/requirement depends on the regional location as follows:

Water Resources Region	Water Requirement for the Maintenance of Turfgrasses (lps/hectare)
I	0.19
II	0.25
III	0.21
IV	0.20
V	0.19
VI	0.19
VII	0.37
VIII	0.16
IX	0.37
X	0.27
XI	0.24
XII	0.43

2. In identified critical areas (Metro Manila and Metro Cebu)
  - a. New and pending water permit applications for deep wells intended for golf courses shall not be accepted and shall be denied respectively. The same shall apply in areas that would be identified as water critical in the future.
  - b. Water permittees are given six (6) months to establish water conservation plans and programs within the golfcourse's water system, otherwise their sources will be closed.
3. In areas outside the critical areas, water permit applications for deep wells intended for golf courses, shall be accepted and processed.
4. Additional requirement for water permit applications intended for golf course is a Project Description Report which shall include the following:
  - a. Water Resources Study to include water balance study.
  - b. Water Conservation Plans and Programs which are based upon specific needs and conditions of the water system to which they apply which include the following:
    - i. Drought emergency plan to balance the most critical golf course water demands during times of water restrictions
    - ii. List of alternative sources of water available (surface water, groundwater, wastewater, recycled water, storage ponds or retention basin onsite to collect storm runoff water etc.)
    - iii. Best management practices for water conservation
5. For water permit grantees:
  - a. NWRB shall revoke or suspend water permits or reduce the authorized volume of extraction of existing deepwells for golf courses in areas adequately served by water service providers, after due notice and hearing.
  - b. All wells of golf courses shall be installed with production meters, flow meters and/or hour meters duly tested and sealed by NWRB or by an authorized testing center. Monthly records of water extraction shall be submitted to NWRB on a quarterly basis.
  - c. The permittee shall establish an observation well/s for periodic records on groundwater fluctuations.
  - d. The permittee shall establish their water conservation plans and programs.
6. The NWRB shall issue Cease and Desist Orders against golfcourses' owners operating without water permits and shall cause the closure of said sources within fifteen (15) days from receipt of order. Appropriate penalties shall also be imposed.