

Management of retention ponds to host wildlife



INSPECTION TASKS To check

- ❑ Water level variation is within limits provided in the maintenance plan.
- ❑ Water quality is appropriate and toxic elements for aquatic species are not detected in periodic biochemical analysis.
- ❑ Appropriate state and condition of vegetation growing at the pond margins and in the water is found, avoiding excessive growth.
- ❑ Margin slopes are smooth and allow the entry and exit of amphibians and other small fauna.
- ❑ No Invasive Alien Species are found.
- ❑ Check for the presence of aquatic fauna that would have to be rescued when ponds need drained.
- ❑ Record presence of flora and fauna target species and any evidence of breeding, and store the information in appropriate databases.



SPECIFIC MAINTENANCE TASKS To do

Prevent fauna access to hazardous ponds

- Install fencing or any other system to avoid access of animals to ponds which can pose a risk to fauna such as poor water quality and where animals may get trapped.
- Guide amphibian movements around the pond to adjacent habitats to stop them getting onto the roads.

Adapt retention ponds as amphibian breeding sites

- Guarantee appropriate water quality and physical conditions
- Avoid the colonization of fish predators.
- Maintain appropriate aquatic vegetation community

Enhance ponds as wildlife habitats

- Identify target species and their habitat requirements.
- Modify the slope gradient around the perimeter, water depth, flow velocity and other habitat features according to the requirements of target species.
- Manage vegetation to achieve a similar habitat to surrounding areas depending on the requirements of target species.



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SPECIFIC MAINTENANCE TASKS To do

- Consider managing ponds at the entrances of wildlife passages to provide drinking points or breeding sites for animals.

Perform rescue of aquatic fauna before ponds are drained

- Seek wildlife/ecology expert assistance to identify species to be rescued, evaluate the population density and plan the best schedule and methods for rescue.
- Apply appropriate methods to rescue fauna living the pond and provide sites to keep them in good conditions while drainage is being undertaken.
- After drainage, restore conditions suitable for wildlife target species and return the animals to the pond, except any Invasive Alien Species.
- Monitor to ensure measures have been effective.



SCHEDULE

- Minimum: once a year, just before seasonal reproductive migrations or periods when target species movements are increased.
- Additional inspections should be planned following floods, strong winds, or other adverse weather events, and after road works, traffic accidents and other potential disturbances.
- The frequency and period of maintenance tasks should be adapted so that they do not affect fauna breeding in the retention ponds.