

## (E) Boat Ramps and Boat Rail Systems

## (1) Policy

- (a) Boat ramps have the potential to increase sedimentation in the lake, diminish water quality, alter natural erosion and sedimentation patterns and alter natural shoreline characteristics. and
- (b) Public boat ramps often contain information about limiting the spread of aquatic invasive species, private individual boat ramps do not.
- ~~(b)~~(c) Boat rail systems, if properly installed, generally have an insignificant impact on the lakeshore protection zone.
- ~~(d)~~ Boat rail systems Facilities designed for removal of boats from the lake are preferred over docks, shore stations, or boat shelters, as the overall impacts tend to be less. for protection of boats.

## (2) Standards

- (a) Private individual boat ramps within a two mile radius of a public boat ramp are not allowed.
- (b) Boat ramps shall be essentially the same elevation as the pre-construction lakebed and lakeshore elevation.
- (c) Footings and/or the base of the boat ramp shall be constructed below the pre-existing grade of the shoreline.
- ~~(a)~~(d) Maximum grade shall be fifteen percent (15%) and no natural slope in excess of twenty five (25%) grade shall be disturbed by construction of a boat ramp.
- (e) All material excavated from the lakeshore to construct the boat ramp and not used as the ramp foundation material shall be immediately and completely removed from the lakeshore protection zone and deposited in such a manner as to prohibit its re-entry into the lake.
- (f) No boat ramp shall exceed six hundred (600) square feet of surface area water ward of the mean annual high water elevation.
- (g) All ramps shall be finished with a non-skid surface to ensure maximum traction for vehicles launching and retrieving boats.
- (h) Concrete boat ramp edges shall be thickened to a minimum of twice the average thickness of the ramp in order to prevent erosive undercutting or breaking of ramp edges. The lakeward end of the ramp shall contain a 45 degree angle lip to allow tires to roll off the end as well as to dissipate wave energy as it rolls up against the ramp.
- ~~(f)~~ The concrete pad shall be at least four inches (4") thick and reinforced with six inch by six inch 10/10 wire mesh or rebar; a minimum of six inch (6") overlap is required if wire mesh is

used.

~~(b)~~ Footings shall be at least eight inches (8") deep and reinforced with at least two (2) #4 (1/2") rebar which are continuous through the footing.

~~(e)~~(i) Boat ramps and rail systems shall be located no closer than fifteen feet (15') to a ~~side boundary line~~ riparian boundary.

~~(e)~~(j) Launching rails shall be suitably anchored to the lake bottom.

~~(f)~~(k) Launching rails shall not extend further than (50') lakeward of the mean annual high water elevation.

~~(n)~~(l) The rails of the rail launching system shall not exceed four (4) inches in height and the rail system shall lie on and follow the grade of the existing lakebed and lakeshore. No portion of the rail shall extend more than eighteen (18) inches above the immediately adjacent land.