

Date: 1/27/21

To: Lake Mills City Council

From: The Rock Lake Improvement Association (RLIA)

Re: Safety on Rock Lake

Summary: On certain summer weekends and holidays, Rock Lake experiences an amount of boat traffic which exceeds common safety standards. One way to manage the number of boats on the lake is to eliminate or reduce street trailer parking on Sandy Beach Road and control the parking at Rotary Park.

## Carrying Capacity and Rock Lake

In this case, carrying capacity refers to the number of boats that can safely recreate on our lake at one time.

The definitive study for a water resource's carrying capacity was done on Lake Ripley, our neighbor. In 2003, *Lake Ripley Watercraft Census & Recreational Carrying Capacity Analysis* was carried out by the Lake Ripley Management District.

see: <https://lakeripley.org/wp-content/uploads/2021/01/Lake-Ripley-Watercraft-Census-Recreational-Carrying-Capacity-Analysis-2003.pdf>

There are 2 basic sets of data used to understand lake carrying capacity.

- 1) What is the usable lake area?
- 2) How much space does an active boater need?

**Usable Lake Area:** Of Rock Lake's 1,233 acres, 1,000 are open water acres with no emergent plants or environmentally sensitive areas.

**Active Boater Need:** an active boater is defined as having a boat larger than 5 HP. Waterskiing, tubing, and similar activity needs are estimated at 30 to 40 acres per boat. This space approximation considers safety and the quality of the user's experience. Boats that are simply idling around the lake are estimated to need 10 acres per boat.

Using the standard of 30 acres per boat for active boating, Rock Lake can safely accommodate 34 active boats, or 124 slowly moving boats on areas that include slow-no-wake.

**DNR Standards:** The DNR maintains that Rock Lake must have a minimum of 29 trailer parking spots to qualify for funding. The recommended maximum public access for a lake the size of Rock Lake is defined as 1 or more accesses that in total have 1 parking space per 30 acres. For Rock Lake, the maximum public access is approximately 40 spaces.

**Watercraft Census on Rock Lake:** Rock Lake clearly exceeds this threshold. The lake has designated launch parking spots (in parking lots) of 28 spaces at the North End, 16 spaces at

Sandy, and as many as 37 additional spots located between the Millpond, Ferry Park, and Elm Point.

In 2003, and again in 2020, RLIA carried out a watercraft census on Rock Lake. On the afternoon of a busy Holiday weekend, (7/5/03) Rock Lake had about 203 boats on the water. On a Sunday afternoon (7/5/20) after a busier Friday and Saturday of a holiday weekend, Rock Lake had about 85 boats on the water, 71 of which were estimated to be active boaters.

Holidays and warm summer weekends are the most popular boating times. If our main concern is safety, fewer boats during the peak periods must be considered. In past surveys, the Sandy Beach area has boat trailer parking which spills out onto the streets and into Rotary Park. At the Sandy Beach area on 7/5/03, there were 66 parked trailers and on 7/5/20 there were 39 parked trailers at the peak of that day. This clearly contributes to exceeding the safe carrying capacity of the lake.

Administrative Code Natural Resources (NR 1) states “that granting permits for boating access on bodies of water where the maximum access standards are exceeded **will materially impair navigation and is detrimental to the public interest.** The department may not pursue public boating access development nor may it approve permits or provide financial assistance for public boating access beyond the levels described in this subsection unless greater levels are established in a plan.”

In the interest of safety, as you proceed with the Sandy Beach boat launch relocation, we ask you to consider ways to limit the parking of boat trailers around Sandy Beach, especially the street parking.

The Board of the Rock Lake Improvement Association