Sand Hill Reservoir Advisory Committee Summary Recommendations: December 7, 2020

- General Recommendations
 - A. Minimal impact on existing Reservoir environment while addressing community desires
 - B. Unrestricted access to area and no fees
 - C. Undertake all action necessary to lower Dam hazard rating and maintain it safely
 - a. Implement engineering report recommendations ASAP
 - b. Rotate fence at current hydrant location to separate beach from Dam
 - c. Vegetative border at rotated fence
 - d. Buoys in water to define "no swimming zone" near dam
 - D. Strict carry in/carry out policy
 - E. Conservation Commission to manage Reservoir resources except Dam
 - F. Organize "Friends of the Reservoir" volunteers
 - G. Periodically reevaluate recommendations and policies
- II Parking

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- A. Clear area off Isaac Frye for no more than 20 off-road parking spaces
- B. Prohibit seasonal (Memorial Day through Labor Day) parking on Sand Hill Rd. (except for accessible parking/drop off/pick up)
- C. Small kiosk with rules/information
- D. Unobtrusive seasonal port-a-potty at Isaac Frye parking area
- E. Locked donations box at Isaac Frye parking area
- III Beach
 - A. Clean up area from (1) fence to about 200 feet past existing beach area and (2) waterline to existing stone wall (consistent with regulatory "minimum impact")¹
 - B. Replenish sand at new beach area (about 35 feet on waterline/20 feet deep) west of existing beach (consistent with regulatory "minimum impact")
 - C. Identify seasonal dog beach (proposed for east of existing beach)
 - D. Small kiosk at beach entry on Sand Hill Rd. with rules and waste receptacle
 - E. Dog waste station

¹ Partially addressed by proposed Fire Dep't hydrant work

- F. Identify path to water for boat launch
- G. Prohibit seasonal fishing at beach areas
- H. Seasonal water testing at recommended intervals
- I. Install signs compliant with Env. Wq 1100ff.
- IV Trails/Paths
 - A. New path from parking area to intersect with existing beach/point path
 - B. Directional sign at intersection of new and existing paths
 - C. Clean up existing beach/point path
 - D. New path from existing beach area west to new beach area
- V Sand Hill Rd.
 - A. Create new granite barrier between road and existing beach
 - B. Regrade road to address drainage into beach area
 - C. Repair existing stone wall along road^{*}

See attached for additional information, description and available cost information.

^{*} Partially addressed by proposed Fire Dep't hydrant work

SAND HILL RESERVOIR ADVISORY COMMITTEE RECOMMENDATIONS AND PROPOSALS FOR THE SAND HILL RESERVOIR DECEMBER 7, 2020

The Sand Hill Reservoir Advisory Committee (the Committee) was established in August, 2020, to make recommendations as to the use, improvement and ongoing management of the Sand Hill Reservoir and certain Town-owned property surrounding it (together, the Reservoir). The Committee has met as a group ten times since its formation, in duly-noticed remote meetings open to the public, and conducted two duly-noticed public site walks, in August and October.

In addition, the Committee commissioned a survey of public opinion relating to the use of the Reservoir (the Survey), overseen and tabulated by Jackie Kahle and conducted during the period from October15 through November 1. The Survey received the greatest number of responses to any Town-oriented survey to date. Almost 85% of respondents were residents of Wilton and 10% of Lyndeborough. Fully 67 Survey respondents volunteered to assist in efforts to implement adopted Committee recommendations and provided their personal information for that purpose. The Committee has considered and weighed the Survey's considerable information in developing the following recommendations and proposals.

The Committee conducted research into the operation, facilities and funding of other NH recreational resources that include a water feature. It also made limited inquiries into the impact of different access and fee scenarios on Town insurance and liability risk, and has made a preliminary review of State regulations and requirements potentially applicable to the public use of the beach area. While this background identified issues and informed the Committee's recommendations below, none of the members of the Committee is in a position to advise the Town with respect to legal risk, insurance implications, required permits or to develop a comprehensive list of state regulations with which the Town will have to comply. The Town will have to confirm its obligations with respect to these issues and to make determinations about the following proposals based on its assessment of the risks.

The Committee is also familiar with the 2017 presentation delivered to the Town by the committee then formed to look into improvements at the Reservoir. Except with respect to its proposed parking area off Isaac Frye Rd. (see below), the Committee determined not to adopt the prior report, but to produce a more detailed set of recommendations.

The Committee has attempted, where possible, to identify costs and potential sources of funding for its individual proposals. The Committee believes, as noted below, that approved recommendations can be supported primarily by volunteer labor (based on the

enthusiasm of Survey respondents and resources available from members of the Committee), donated materials (including possible excess materials held by the Town) and in some cases, the ability of the Town to absorb the cost of certain initial work and ongoing maintenance into its current operating budget. If the Town determines that the Committee's assumptions with respect to any of these sources are inaccurate, it may eliminate certain activities or support a warrant article to fund them.

In addition, at its November 19 meeting, Chief Nourse informed the Committee that the dry hydrant on Sand Hill Rd. had failed mandatory testing and that the Fire Department would seek warrant funding for its repair at the 2021 Town meeting. He described the work necessary to address the situation, including relocating the hydrant to the west, widening Sand Hill Rd. and rebuilding the existing stone wall closer to the waterline to allow space for a new vehicle pad, placing a new pipe in the Reservoir and cleaning up the beach area between the old and new locations of the hydrant. The proposed work overlaps some of the Committee's specific recommendations, as noted below. The timing, rather than the nature, of these recommendations may change depending on when the Fire Department can undertake this project.

The Committee includes Bart Hunter, Chair; Dan Ross, Vice Chair; Dave Boissonnault, Gerry Coffey, Donna Crane, Dave Estey, Dov Jaffe, Christine Keller, Jeff Maher, Don Nourse, Eric Olesen and Karon Walker. Although not every recommendation was approved unanimously by all members of the Committee, all of the following nevertheless represents the consensus of the group.

General Recommendations

- <u>1.</u> Preserve Natural State of Reservoir: Echoing a large proportion of Survey respondents, the Committee believes that the Reservoir should be maintained largely in its natural state. For this reason, and for financial reasons, the Committee recommends that any work requiring State Wetlands or Shoreland Protection permits (including clearing, grading, any added fill or ground cover, replenishment and establishment of new trails) qualify as "minimum impact" to the protected areas, as defined in applicable environmental regulations. The Committee sought to balance this general view with specific proposals that will facilitate multiple desirable activities identified by the Survey (general enjoyment of nature, swimming, hiking, boating and fishing) and address identified obstacles to their enjoyment (overcrowding, parking, trash, etc.). Other than the beach areas and the new parking area described below, the remainder of the Reservoir should remain untouched at this time, and the changes proposed below should be implemented in a way that limits their impact on the site.
- 2. <u>Access/Fees</u>: In considering recommendations about access to the Reservoir, the Committee noted that the Town might impair its statutory recreational liability, and thereby unacceptably increase its risk, if it limits access to the Reservoir or

charges any fees related to its use. Based on discussions with the Town's current insurer, if the Town loses recreational immunity for any activities at the Reservoir, the Town would bear the full risk of the first incident (unless it had obtained separate commercial insurance), and coverage for later incidents could be costly. In addition, enforcement of restrictions might prove difficult. Moreover, it is hard to determine whether and to what extent the Covid pandemic uniquely affected the use of the Reservoir, and particularly its beach area, this past summer.

Accordingly, at this time, the Committee recommends that use of the Reservoir in the coming calendar year not be restricted, and that no use or related fees, including for parking, be imposed. At the end of calendar year 2021, the Town and the Committee, or a similar committee then appointed, should reevaluate these positions, but only with respect to future summer seasons (Memorial Day through Labor Day), based on additional experience and, if necessary, legal advice. The Committee does not believe that access should be restricted or fees imposed for off-season use. The Committee does not recommend efforts to advertise widely the availability of the Reservoir.

Of course, the Town should actively seek to limit its liability, to the extent it can, by posting appropriate signage around the Reservoir and by complying with specific State regulations therefor.

- 3. Address the Hazard Rating of the Dam and Ongoing Maintenance: The Town should undertake, as soon as possible, repairs to the Sand Hill Reservoir Dam (Dam) and adjustments to the Reservoir's water level identified by the Town's engineers as necessary to reduce the Dam's rating from "high hazard" to a more acceptable rating. The Town has funding reserves to complete this work and provide for ongoing maintenance.
- <u>4.</u> <u>Carry In/Carry Out</u>: In lieu of trash cans, which require regular maintenance and are subject to vandalism and animal intrusion, the Committee recommends that the Reservoir be subject to a strict carry in/carry out policy (except for a small receptacle on the proposed kiosk).
- 5. Delegate Management to the Conservation Commission: The Committee recommends that the Town delegate to the Conservation Commission (the ConCom) implementation of certain of the proposals below and ongoing management of the public Reservoir resources. The ConCom should not, however, have responsibility for the Dam or maintenance of the Reservoir level. As the Select Board acknowledged at its November 16 meeting, these activities should not be undertaken by the ConCom or other volunteers.

- <u>6.</u> <u>Encourage Volunteers and Donations</u>: Members of the Committee have volunteered to form a group dedicated to supporting the Reservoir through donations of time, materials and money, and the Committee recommends that, if feasible, a locked box for donations be placed in the proposed new parking area (see below).
- <u>7.</u> <u>Regular Reevaluation</u>: The Committee recommends that, in any event, the Town and the Committee, or a similar committee then appointed, regularly reevaluate usage, existing policies, rules and possible plans for further enhancements, including for winter activities, at the Reservoir.

In addition, the Committee believes that its proposal to create off-street parking for up to 20 vehicles, as set out below, will largely address convenience and overcrowding at the Reservoir, including the beach area, as well as at Garwin Falls. As a result, to preserve emergency access and keep the area more attractive, the Committee recommends that parking be prohibited on Sand Hill Rd. during the summer season, except for vehicles identified as needing accessible parking, and that drop-off/pick up only be permitted.

More specific recommendations are set forth below and are organized in "phases" loosely reflecting their timing. In any given phase, activities may be sequential or concurrent.

PHASE ONE						
ACTIVITY	Proposed	Initial Cost -	Funding	Ongoing Cost-	Funding	Notes
	Timing	Materials/Labor	Source(s)	Maintenance	Source(s)	
Evaluate and apply for	Evaluate	\$400 filing fee	ConCom;	N/A		Not expected to be
necessary State/Federal	immediately;	for new beach	volunteers			substantial if work
permits: likely Wetlands	apply upon	replenishment				qualifies as
Act, covering any clearing,	approval	Permit by				"minimum impact."
grading, replenishment,		Notice; \$25				Permits for other
approved ground cover,		filing fee for				activities may be
new trail.		trail Statutory				required.
		Permit by				
		Notice;				

Reorient fence at existing dry hydrant location to prevent access to dam and related work.	Immediate	assistance with application Extra fence from Town, if necessary	Volunteers or Emergency Services operating budget	N/A		Recommended by Emergency Services departments.
Place warning signs at dam.	Completed					Recommended by Emergency Services departments.
Place warning buoys to define "no swimming" area near dam.	Before next summer season	\$400	ConCom	Place and remove each season	Town operating budget	Recommended by Emergency Services departments.
Clear flat area on Town land off Isaac Frye Rd. (site of prior logging) to accommodate no more than 20 parking spaces; clear debris; grade as necessary. Area/size of spaces are described generally in prior Reservoir Committee report. Consider defining perimeter with natural barrier (e.g., logs).	Early spring 2021 or before, as practicable		Volunteers	Intermittent mowing Off-season plowing not recommended at this time	Town operating budget; volunteers	Research indicates that paving material is unlikely to be necessary; see report from prior Reservoir Committee. 78% of Survey respondents supported dedicated parking area and identified parking as a significant obstacle to enjoying the Reservoir. Activity may require permit; no trees to be felled. See

						Appendix A for approximate proposed location.
Clear path from new parking area to intersect with existing path from beach to point.	Early spring 2021 or before, as practicable		Volunteers	Minimal	ConCom; volunteers	Facilitate access while maintaining rustic nature. Activity likely will require permit. See Appendix A for approximate proposed location.
Clean/reestablish existing path from beach to point.	Early spring 2021 or before, as practicable		Volunteers	Minimal	ConCom; volunteers	Maintain rustic nature of existing paths. See Appendix A for approximate location.
Clean up area (1) north/south from Sand Hill Rd down to waterline, (2) east/west from reoriented fence near dam to a point about 200 feet east of current defined beach area; clear debris; grade as necessary, all consistent with "minimum impact.".	Early spring 2021 or before, as practicable; timing may depend in part on Fire Dep't warrant funding		Fire Dep't warrant article/volun- teers with machinery	As needed	Volunteers	Work from fence to existing beach likely implemented by Fire Dep't in connection with hydrant repair. Grading may require permit; no excavation, digging or fill contemplated at this point.
Establish better granite barrier between Sand Hill Rd. and beach (at present gap in the old stone wall).	Upon approval or upon availability of	Granite or other suitable rock from Town supplies or	Volunteers	N/A		Recommended by Emergency Services departments.

	materials	repurpose stone from local upcoming bridge repair				
Repair stone wall along Sand Hill Rd.	Upon approval or upon availability of materials; timing may depend in part on Fire Dep't warrant funding	Suitable rock - from Town supplies or repurpose stone from local upcoming bridge repair	Fire Dep't warrant article/ Volunteers	N/A		Work on wall between existing and proposed hydrant locations (relocation and repair) likely implemented by Fire Dep't in connection with hydrant repair.
PHASE 2						
Create vegetation barrier in front of fence at dam	Spring 2021	Native cover	Volunteers and donations	Minimal	Volunteers	Native bushes or long grasses recommended. Likely no permit required.
Post directional sign at intersection of new path from parking area and existing beach/point path	Spring 2021					
Post signs as required by NH Code Administrative Regulations Env-Wq Sections 1100 ff.	Spring 2021			N/A	N/A	See Appendix B for examples.
Place/replenish sand over a portion of cleared new	Spring 2021	Sand: \$20/cu. yd delivered;	Volunteers and donations	Periodic regrading;	Town operating	64% of Survey respondents

beach area west of existing beach, approximately 30 feet along waterline and 20 feet up.		"minimum impact" may limit sand to 10 cu. yd; total \$200		cleaning	budget; volunteers	supported some or significant expansion of the beach area. Determine exact area based on "minimal impact" requirements.
Mow "meandering" path between existing beach and new beach area to west.	Spring 2021		Volunteers	Intermittent mowing	Town operating budget; volunteers	Likely no permit required.
Identify seasonal "dog friendly" beach on cleared area to east of existing beach; not allowed on other beach areas.	Spring 2021; timing may depend in part on Fire Dep't warrant funding	Possible signage		N/A		Supermajority of Survey respondents would permit dogs on beach. Unlikely to need sand or other cover in this area.
Prohibit seasonal fishing at entire beach area.	Spring 2021	Possible signage		N/A		Recommended by Emergency Services departments.
Redirect drainage on west side of existing beach to more appropriate area.	Spring 2021		Existing Town operating budget			Achieve by regrading Sand Hill Rd.
Place small kiosk to post usage rules, trail and other information at Sand Hill Rd. near beach entrance; attach small trash receptacle(s) for fishing	Spring 2021		Volunteers and donations	Minimal waste removal	Town operating budget; volunteers	See Appendix C for proposed rules.

refuse and dog waste.						
Place dog waste station near beach kiosk.	Spring 2021	\$300		Waste removal	Town operating budget	
Place small kiosk to post usage rules, trail and other information at parking area.	Spring 2021		Volunteers and donations			See Appendix C for proposed rules.
Place seasonal port-a-potty at parking area.	Late spring 2021	Rental and weekly maintenance: about \$75- \$100/month (\$270- \$350/season)			Town operating budget	61% of Survey respondents supported this; make as unobtrusive as possible.
Post carry-in/carry out and no littering signs.	Spring 2021			Periodic trash removal	Volunteers	Survey respondents identified trash and litter as obstacle to enjoyment of the Reservoir. Reevaluate this policy periodically based on experience.
Place locked "Donations" box at new parking area.	Late Spring 2021	Volunteer		Periodic collections	Town operating budget	Monitor for vandalism.
Post seasonal "no parking" signs on Sand Hill Rd. (other than for drop- off/accessible parking).	Late Spring 2021					Addresses overcrowding and provides some accessible parking.

Mark path from Sand Hill Rd. to beach for boat launch.	Late Spring 2021				Accommodate users of non-motorized watercraft and protect beachgoers.
Seasonal water testing	Summer 2021	Testing: \$45 per sample (ChemServe)	ConCom	Town operating budget	Protect swimmers and boaters. Need to determine frequency and number of samples appropriate to relatively still water. See Appendix D for standards.
PHASE 3					
Evaluate implemented policies, recommendations and proposals based on	Post-2021 summer season				
prior season's experience; evaluate Phase 3 recommendations.					
Consider performing additional grading at site of existing beach, adding sand or ground cover, and creating a kind of "patio" for possible placement of picnic tables or benches.					Determine desirability after additional usage experience and consistent with "minimum impact." Activity will require additional permit.
Consider placing ground cover (sand or grass) at beach areas elsewhere					Determine desirability after additional usage

around Reservoir (e.g., on points opposite existing beach).			experience. Activity will require additional permit.
Evaluate practicality of composting toilet and shed.	About \$4000 plus materials for shed	Investigate grant availability	
Evaluate desirability of additional trails.			Determine desirability after additional usage experience. Activity may require additional permit.

Appendices: A. Satellite view of area – approximate locations

- B. Regulations applicable to beach postings
- C. Proposed rules for use of Reservoir resources
- D. Water Quality Standards

Appendix A - Satellite View of Area – Approximate Locations

Sand Hill Reservoir



Appendix B - Sample Public Beach Posting Regulations - Env-Wq 1100 ff

1102.18 "Designated beach" means a public bathing place that comprises an area on a water body and associated buildings and equipment, intended or used for bathing, swimming, or other primary water contact purposes. The term includes, but is not limited to, beaches or other swimming areas at hotels, motels, health facilities, water parks, condominium complexes, apartment complexes, youth recreation camps, public parks, and recreational campgrounds or camping parks as defined in RSA 216-I:1, VII. The term does not include any area on a water body which serves 3 or fewer living units and which is used only by the residents of the living units and their guests.

1102.45 "Public bathing place" means a place or location, together with buildings and equipment, intended or used for recreational or therapeutic bathing, swimming, or diving, and operated by or for any governmental subdivision, public or private corporation, partnership, association, or educational institution open to the public, members, or students, whether on a fee or free basis. The term includes public bathing facilities, flow-through bathing places, and designated beaches. The term does not include any bathing place that serves 3 or fewer living units and that is used only by the residents of the living units and their guests.

1104.03 (c) If a designated beach ... is not monitored by a lifeguard or operator, the owner [shall] post a sign at all access points notifying patrons of the absence of a lifeguard or operator, as applicable.

1104.05 (a) If the owner of a ... designated beach ... has developed safety rules, the owner shall post conspicuously-displayed notices informing patrons of the safety rules developed by the owner.

1104.05 (b) The owner of a ... designated beach shall ensure that:

...If a telephone or radio capable of reaching emergency services is not located within 200 feet of the water, then a sign is posted informing patrons of the location of the nearest public telephone or radio capable of reaching emergency services.

1104.06 (b) The owner of a designated beach shall:

(1) Provide emergency rescue equipment such as a rescue board, rescue tube or ring, or other emergency rescue equipment deemed appropriate by the owner; or

(2) Prominently post at least one sign that clearly states that no emergency rescue equipment is available.

Appendix C – Proposed Rules for Use of Reservoir Resources

Rules specific to the use of the Reservoir, not inconsistent with existing Town ordinances (but not unduly repeating those ordinances), should include:

Carry-In/Carry Out: No Littering No Alcohol No Fires "Scoop the Poop" No Power Watercraft No Scuba Diving No Motorized Vehicles Outside of the Parking Area

Rules will be posted at both proposed kiosks, as well as on an appropriate website. Wilton Police charged with enforcement.

Appendix D - Water Quality Standards for Designated Beaches

1105.14 (a) As established by RSA 485-A:8, a designated beach shall be considered unsafe for public use if:

(1) The standard specified in (b)(1) or (c)(1), below, as applicable, is exceeded by 70 counts in any one sample or by any amount in 2 or more samples taken during the same sampling event; or

(2) The standard specified in (b)(2) or (c)(2), below, as applicable, is exceeded in 3 samples over a 60-day period.

(b) For freshwater beaches, the standards shall be:

(1) For purposes of (a)(1), above, E. coli bacteria are present in numbers greater than 88 counts/100 mL of water; or

(2) For purposes of (a)(2), above, E. coli bacteria are present in numbers greater than a geometric mean of 47 counts/100 mL of water.