# Deep Creek Lake Watershed Plan Summary of Public Input to Develop Problem Statements and Draft Goals

# Staff report:

Input on the issues and concerns from the Steering Committee, the public meeting group discussions and the individual submissions both from the public meeting and on-line into draft goals was compiled in three steps. First, the issues expressed were compiled into the three charts below and compared regarding how often the issues were expressed. In general, the categories of issues and concerns were consistent and were then compiled under 8 topical areas. These topics are further expressed below in problem statements based on the additional information heard and compiled at the public meeting. The Charts show the priority of each issue and under what problem statement the issues is expressed. The final step involved developing draft goals for consideration by the Steering Committee from which actionable strategies can be developed. Examples of how goals can be developed into objectives and strategies are provided under the Water Quality draft goal.

Chart 1 reflects the Issues and subsequent prioritization of those issues of the Steering Committee (SC)

Issue	Priority	Problem Statement Topic
Lake Levels	First	Lake Levels
Erosion and Sedimentation	Second	Erosion and Sedimentation
SAV	Third	SAV AND Water quality
Industrial Impacts	Fourth	Residential commercial and industrial growth
Infrastructure	Fifth	Water quality AND Residential
		commercial and industrial growth
Forestry and Agriculture	Sixth	Water quality AND Residential
		commercial and industrial growth
Water quality	Seventh	Water Quality
Geese	Eighth	Water quality
Growth Pressure	Ninth	Residential commercial and industrial growth
Communicate / Educate	Tenth	Public understanding and
		participation

Steering Committee Issues prioritization

Chart 2 reflects the October 5, 2013 Public Meeting group discussions as reported by the group facilitators. Groups prioritized the issues and staff developed the following scoring scale to provide the combined prioritization score: First priority = 4 points; Second priority = 3 points; Third priority = 2 points; Fourth priority = 1 point.

Issue	Group	Group	Group	Group	Total	Problem Statement Topic
	1	2	3	4		
Water quality	4 <sup>th</sup>	No	1 <sup>st</sup>	1 <sup>st</sup>	9 points	Water Quality
	priority		priority	priority		
Agency	1 <sup>st</sup>	1 <sup>st</sup>	No	No	8 points	Accountability, agency
coordination,	priority	priority				coordination and lake
accountabilit						management responsibilities
у						
Lake levels	2 <sup>nd</sup>	No	$2^{nd}$	No	6 points	Lake Levels
	priority		priority			
Quality of	No	No	No	2 <sup>nd</sup>	3 points	Water Quality AND
recreation				priority		Residential commercial and
						industrial growth AND
						recreation needs and conflicts
SAV	No	No	2 <sup>nd</sup>	No	3 points	SAV AND Recreation needs
			priority			and conflicts
Economic	No	$2^{nd}$	No	No	3 points	Residential commercial and
impact of		priority				industrial growth
remediation						
Growth,	3 <sup>rd</sup>	No	No	No	2 points	Residential commercial and
industriali-	priority					industrial growth
zation,						
commerc-						
ialization						
Sediment and	No	3 <sup>rd</sup>	No	No	2 points	Water quality AND Sediment
erosion		Priority				and erosion AND
						Recreational needs and
						conflicts
Lack of	No	No	No	3rd	2 points	Public understanding and
public				priority		participation
information						

Chart 3 reflects the individual input responses from the Public Meeting submission and the Web responses to date.

This chart also includes DNR's interests in a category on Streams. The eleven categories and one extra unspecified station comprised the twelve stations that were set up at the October 5, 2013 Public Meeting.

Issue	Number of mentions	Problem Statement Topic		
Lake Levels	One	Lake Levels		
Erosion and Sedimentation	One	Erosion and Sedimentation		
SAV	None	SAV AND Water quality		
Existing and potential Industrial Operations	Two	Residential commercial and industrial growth		
Infrastructure	Two	Water quality AND Residential commercial and industrial growth		
Forestry and Agriculture	None	Water quality AND Residential commercial and industrial growth		
Lake Water quality	One	Water Quality		
Geese	One	Water quality		
Growth Pressure	None	Residential commercial and industrial growth		
Communicate / Educate	None	Public understanding and participation		
Streams	None	Lake Levels, Water Quality, AND Growth		
Unspecified	One, conflicting regulations	Accountability, agency coordination and lake management responsibility		

#### **Draft Problem Statements:**

Upon review and approval by the Steering Committee these statements will be included in Section 1 of the Plan (Process for Plan Development) as presented in the draft outline provided to the Steering Committee on September 11, 2013.

The problem statements lead to the development of draft goals with objectives and strategies for implementing those goals. The draft goals are below the problem statements. The specific goals that address the problem statements are indicated in parentheses.

# **Topic - Lake Levels**

- 1. Lake residents are concerned that variations in lake levels are affecting shoreline stability and recreational access. (Goals 3 &4)
- 2. Downstream users are concerned that change in the current structure of lake releases will impact their economy. These economies include both whitewater recreation and power generation. (Goal 1)
- 3. Cold water fisheries are also dependant on continuous cold water releases. (Goal 1)

#### Topic – Water Quality (Goal 3)

There is concern that water quality in the lake will worsen. Specific sources of concerns include septic systems, sewage spills, stormwater runoff, geese, gasoline engines, roads from gas extraction sites, lawn management, and agriculture.

#### Topic – Residential, Commercial and Industrial Growth (Goals 2 & 3)

Citizens are concerned that uncontrolled industrial, commercial and residential development will adversely impact water quality, increase traffic, degrade roads and impair the aesthetic beauty of the lake and watershed. Specific concerns involve increased impervious cover, increase in pollution from stormwater runoff, impacts from septic systems, wastewater treatment capacity and gas extraction development. (additional from DNR – reduction in tree canopy from clearing for development). Protection and management of ground water drinking water supplies was also expressed as a need for inclusion in the Plan.

# Topic – Submerged aquatic vegetation (Goals 2 & 4)

Lake users are concerned for the growth of SAV affecting recreational uses particularly boating and swimming. Other concerns involve the spread of invasive SAV. Some citizens recognize that SAV are an indicator of healthy water quality and fish habitat. Most boaters view SAV as a nuisance and are concerned about safety when swimming areas where there are SAV.

# Topic – Erosion and sedimentation (Goals 3, 4 & 6)

Users and lake residents expressed concern for shoreline erosion. Sources of erosion include wave action from boat traffic and weather as well as fluctuation in lake levels resulting in unstable shorelines and loss of trees in buffers. Residents are concerned about sediment movement and deposition in the lake and the coves. Sources of sediment include shoreline erosion, stream channel erosion and movement from new or existing impervious surfaces.

# Topic – Accountability, agency coordination and lake management responsibility (Goal 6)

- 1. Citizens expressed a lack of understanding, clarity and accountability regarding who/what agency is responsible for different management actions on and around the lake and in the watershed.
- 2. Citizens also felt the agencies are not working together in a coordinated fashion and a localized management authority is needed.

# Topic – Recreation needs and conflicts (Goals 2 & 4)

Users expressed concern for the over use of the lake by boaters.

Concerns were expressed for the perceived reduction in bass fish.(to be verified through DNR fish surveys)

Concerns were expressed over noise levels from boats.

Inadequate public access to the lake was also expressed as a concern.

# Topic – Public understanding and participation (Goals 5 & 6)

Concern was expressed for the lack of participation from watershed residents as opposed to lake residents.

There is a lack of access to information on the lake governance as well as information on the watershed and the lake.

The following goals are proposed for consideration by the Steering Committee based on the problem statements. <u>Example</u> objectives and strategies are provided as well to

**support the thought process through to development of recommended action.** (Note to reader – The following example goals were not confirmed by the Steering Committee on November 4, 2013 but will be adjusted by the four subcommittees and approved by the Steering Committee in future meetings)

- *Goal 1* Protect and maintain the natural resource based economies on the lake, in the watershed and the influence area.
- *Goal 2* Protect the integrity of aquatic and terrestrial plants, animals and habitats within the watershed and its receiving waters (include SAV)
- *Goal 3* Protect and improve the quality of surface and ground water resources within the watershed.

**Objective 3.1** - Manage goose populations affecting water quality.

*Strategy 3.1.1* – Develop a plan to effectively manage goose populations by XX Date

Objective 3.2 – Reduce sediment loads to the lake by XX percent by XX Date.
Strategy 3.2.1 – Fully assess sources of sediment loads by XX Date and develop a priority project list for addressing those sources.

*Strategy 3.2.2* – Develop funding needs and sources for priority projects.

*Objective 3.3* – Reduce nutrient and sediment inputs to the lake from lawns and lakeside properties.

*Strategy 3.3.1* – Assess the extent of erosion caused by fluctuation in lake levels and develop a plan to address high priority issues

**Objective 3.4** - Increase residential tree canopy.

*Strategy 3.4.1* – Assess opportunities for increasing residential tree canopy by XX date and develop a program in cooperation with the GC Forestry Board and the POA to support tree planting on residential properties.

- *Objective 3.5* Improve/enhance stream and lake vegetative buffers by x% per year with an end goal of X% by XX Date
- *Objective 3.6* Protect groundwater and surface water sources of drinking water within the watershed.
  - *Strategy 3.6.1* Develop and implement a wellhead protection plan for public drinking water wells.

*Strategy 3.6.2* – Provide educational programs and materials focused on protecting individual domestic wells.

Goal 4 – Preserve and enhance the quality of recreational opportunities.

Goal 5 - Improve coordination of governance for the lake and its watershed.

Goal 6- Nurture an informed, educated and engaged citizenry on the lake and its watershed.