DIRECTORY OF LAKES AND WATERBODIES OF J&K STATE

Using Remote Sensing & GIS Technology

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Acknowledgement

Lakes and Water bodies are one of the most important natural resources of our State. Apart from being most valuable natural habitat for number of flora and fauna, these lakes and Water bodies are the life line for number of communities of our state. No systematic scientific study for monitoring and planning of these lakes and water bodies was carried out and more than 90%of our lakes and water bodies are till date neglected altogether. The department realized the need of creating the first hand information long back in 1998 and prepared the Directory of lakes and water bodies using Survey of India Topographical Maps on 1:50,000.With the advent of satellite technology the study of these lakes and water bodies has become easier and the task of creating of information pertaining to these lakes and water bodies using latest high resolution data along with Survey of India Topographical Maps and other secondary information available with limited field checks/ground truthing has been carried out to provide latest information regarding the status of these lakes and water bodies. The final report on these lakes and water bodies is the outcome of joint efforts put in by number of persons who were directly and indirectly involved for accomplishing the task to whom I am highly indebted.

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Dr.Hanifa Nasim,
Principal Investigator

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INTRODUCTION

The state of Jammu and Kashmir is the northern most state of India lying between 32°-17° to 36°-30° N latitude and 73°-26° to 80°-30° E longitude and comprises 3 distinct areas viz Jammu, Kashmir and Ladakh, each with unique physical, social and cultural features. The state is bounded by China in the north east, by Afghanistan in the North West and in the west by Pakistan. The southern boundary is contiguous with Punjab and Himachal Pradesh. Borders on north, east and west have natural barriers; state is normally accessible only from south. The total area of the state is 2, 22,798 sq.kms. The total population as per 2001 census was 101, 43,700 .The present population (as per the projection) in 2011 is over 131, 85,059

Himalayan Ranges extending north west to south east cover maximum part of the state with 300 to 6000 meters and above in height. Zanskar range which starts from Nampa rises to a height of 6000 meters and above. The highest peak in this region is Mount Godwin which has a height of 8697 meters. Kashmir valley is separated by this range formed by river Indus and also blocks the south western Monsoons. Pir Panjal range which has a height of 3420 meters separates Jammu province from Kashmir valley.

The important rivers which flow through the state are Indus, Jehlum, Chenab and Ravi. Indus starts from Mansarowar at a height of 5100 meters in the Himalayas and flows diagonally towards North West. Jehlum,the other important river starts from a spring at Verinag which lies north-east of Anantnag Town, the river flows through the city of Srinagar and the town of Sumbal, Sopore and Baramulla. The third important river of the state is Chenab which also starts from Himalayas

JAMMU REGION

Jammu is also the winter capital of the state. It is an ancient city and both historically and culturally has got a distinct identity. This region is home of the Dogras, whose name is derived from the Sanskrit word “dogirath” meaning “two lakes”, and these two lakes being Mansar and Surinsar, which are amongst the tourist attractions of the region. The Dogra rulers were great patrons of art. As is seen, most of the temples, forts and palaces are the creation of Dogras, which are a great gift to their city. Holy places to the various manifestations of Devi (the Goddess) are found all over Jammu and Kashmir. The most holy cave shrine is the Vaishnodevi. It is about 60kms from Jammu.

KASHMIR REGION

Kashmir is known as the land of meadows, lakes and springs. The oldest written account of Kashmir confirms that the valley was a large lake surrounded by towering snow bound mountains. Geological findings also confirm that the valley with its fossil remains of aquatic animals and plants was once submerged under water. Due to volcanic convulsion, this great lake was drained away. The supporting proof to this theory is the formation of Karewas, which are raised plateaus like formations with sloping sides separated by ravines. The scenic beauty of Kashmir is legendary. Where ever one travels, the mountains are a constant presence. The beautiful national highway which connects the valley to the rest of India is a picturesque road, climbing up and down some of the majestic mountains like Pir Panjal. While crossing the Jawahar Tunnel, a 3kms, long tunnel carved through the heart of the mountains forms a splendid view point. The first to catch the eye at the foot of the PirPanjal

mountains is Verinag, the spring that is the source of the river Jehlum which flows into Pakistan.

Srinagar is the summer capital. The most famous Dal Lake, Nagin Lake, Hariparbat fort, Shankaracharya temple, Mughal Garden (Nishat, Shalimar, Cheshmashahi, tulip gardens ,Pari Mahal), Hazratbal Mosque, are found within the vicinity of Srinagar city. Amaranth, the holy cave with a huge ice lingam, is situated at a height of 3880 meters, and is 142kms. to the north east of Srinagar. The road to this holy cave passes through torrential streams,ice bridges, and frozen glaciers and a deep blue high altitude lake of Sheeshnag. Another temple which is 21kms from Srinagar is Khir Bhavani. The Dachigam National park, which is located to the east of Srinagar, is the home of Hangul. The other places worth to see in the valley are Verinag, Kokerneg, Achabal, Pahalgam, Ahrabal Fall, Gulmurg, Sonamarg, yousmarg,etc.

The Kashmir valley has four distinct seasons. The winter is quite severe. The whole valley is covered with thick blanket of snow. The landscape is interspersed by villages, leafless trees, rivers, streams and forests of deodar, blue pine and Fir.

The spring brings pleasant sunshine, the snow starts melting, the spring flows start blooming in gardens and meadows, the fruit trees of almond apricot, peach and cherry are in full bloom in various shades of white and pink. The agriculture activity starts with ploughing in the valley plain and the terraced fields on hills. The paddy seedling are pricked out.

The summer is a season of flowers- with dehaliyas,cannas, roses, merry golds, gladoiols, zinnias, in full bloom. The temperature sometime touches 34°C. The agriculture activity of hoeing and weeding is undertaken in the paddy fields. The market is flooded with different types of fruits. The autumn brings various shades o0f colors with chinars

turning Golden brown and the poplars and willows shedding their leaves. The apples, pears are ripe. The rice is harvested. The saffron flowers are in bloom in late autumn.

LADAKH REGION

Ladakh is situated to the east of Kashmir valley. Ladakh the northern frontier of India is a area of high altitudes, glaciers, streams and beautiful valleys hidden among some of the tallest mountains in the world in the "Karakoram Range". In the past, Ladakh was the region through which several trade routes of Central Asia passed through. This is also the land of extreme cold; during winter it goes upto -38°C. The intensity of sunshine is also strong. This is also the land of Buddhism. The people of Ladakh are a mixture of the Mongoloid and the Aryan races. The features of all are Mongoloid and they speak Ladakhi language. It is also the land of Gumpas and Lamas. Since the Gompa is the home of a large number of Lamas, it is a community in itself. Pershed on a hill or high elevation, most Gompas rise several storey's high. Hemis is one of the most important Gompas in Ladakh.

The other interesting places are Zanskar and Nobra valley. Zanskar is the valley bounded by Kargil and Lamayuru in the north and Kishtwar and Manali in the south. It is accessible from Himachal as well as Kishtwar. River Zanskar, which cuts across the zanskar Range to join the Indus River,serves as a good road for vehicles to cross over the Gorge into Padum once it is frozen solid in winter. The Nobra valley, which is situated at a little lower elevation, has temperate type of climate. This valley is known for its number of hot springs, fields, meadows and poplar plantations. The main rivers apart from Indus river which have

their sources in Tibet are Shyok, Nobra, Zanskar, Suru, and Drass. Also three large and beautiful salt lakes, Tsomorari, Pangong, and Rupshu are located here. Apart from the highest peaks of Sesar Kangri and Nun Kun there are many other un-named peaks in the Zanskar Range.

SOILS

In Kathua and Jammu mainly alluvial soils are found, which are loamy with little clay content and contain small quantity of lime with high magnesium content.

There are three parallel belts widely apart from Forest and Hill soils, one stretching from Poonch to Kathua in Jammu province second North West of Jhelum valley in Kashmir province and the third belt stretching from south eastern part of Ladakh range. The soils are generally mixed with pebbles.

In southern part of Udhampur and Doda district brown soil under Deciduous Forest are found. Colour of the soil is dark-brown and varies from dry loams to silt loams with gravels in a small percentage.

In middle Ladakh range two isolated patches (one in Ladakh and another in Doda district) of Podzolised soil occur over a long stretch.

In Poonch, Udhampur and Anantnag district sub-mountain soils are mainly found. In the valley this soil is cultivated intensively and rice is the main crop.

GEOLOGY

The state is situated in the transverse segment of Himalayas known as the Punjab and Kashmir Himalayas.

OUTER KASHMIR OR OUTER HILL DIVISION

The division extends from the foot hills of Punjab to Pir Panjal range. Rising gradually from plains of Punjab, the division becomes sub-mountaineous to semi-mountaineous northwards. Being rugged in topography the area is locally called Kandi. The hills are roughly paralled to each other. The Geological structure is generally anticlinorium. The rock dominating in this division is Shiwalik Murees. Besides there are dogra slates (Salkhalas) and Eocene lime stone in this division.

VALLEY DIVISION / CENTRE DIVISION / JHELUM VALLEY DIVISION

This division extends from Pir Panjal range upto zojila range or Zanskar range. In between Zanskar and Dhauladhar ranges is a lush green Kashmir valley division. The valley division is of spindle shape with Jhelum river flowing through it. In the south and south east full sequence from Cambrian to carticeous dominantly limestone interrelated with shales and stones are exposed. On the right bank of the river from Verinag upto Boniyar, Karewas of first and second order are exposed. On the left bank besides lime stones and shales numbers of flows called Punjal traps are exposed.

HIGH MOUNTAIN DIVISION / INDUS VALLEY DIVISION / GREATER KASHMIR DIVISION

In between Zanskar and Karakoram ranges is a vast high mountaineous division called the Indus valley division of Kashmir. This division is mainly comprised of rock formation called Indus facies and plutonic. In Zanskar area rocks are mostly metamorphic, while as in Kargil area the rocks are sedimentary with a few basaltic extrusive.

CLIMATE

State of Jammu and Kashmir lies in subtropical latitudes, the major part of the state resembles to that of mountainous and continental parts of the temperate latitudes. Generally prevailing weather and climatic conditions of the state have micro level variations. The state having three distinct areas of Jammu, Kashmir and Ladakh, though fall in sub-tropic but due to difference in altitude modifies the climate of these areas from temperate to arctic. Western part of the state faces more precipitation than the eastern part. The mountain ranges which run parallel to each other act as climatic barriers. Pirpanjal being the main barrier of south west monsoon. The other barrier is the great Himalaya and Ladakh is in its rain shadow:-

Factors responsible for the climate of the state are as under:

1. Latitude 2. Altitude 3. Terrain 4. Distance from sea

METHODLOGY

Use of Remote Sensing and GIS technology for identification and creation of database for lakes and water bodies. Remote sensed data may provide a cost-effective method to reduce, but not replace, expensive ground data collection. A higher resolution sensor will tend to more accurately reflect the actual extent of land-cover in any given class, and may produce a higher number of classes if, for example, one of the classes happens to occur only in isolated patches surrounded by other, more dominant, classes (e.g., small wetlands in forested areas .The combination of remote sensing and geographical information system is an effective and powerful tool for analyzing any land use/land cover data . Remote sensing is a good tool for identifying threats generated by any change on earth to the different environmental and natural resources.

In the present study the lakes and water bodies were interpreted from latest IRS LISS III DATA Of 2009 along with the SURVEY OF INDIA TOPOGRAPHICAL MAPS For the year 1967 and the methodology involved is as follows..

a) Firstly the base maps were prepared using SURVEY OF INDIA Topographical maps of 1967 on a scale of 1: 50,000 which were scanned and geo-referenced.
b) Secondly the lakes and water bodies were digitized using the satellite data of RESOURCESAT I (LISS-III) data of year 2009 which was geo-coded and rectified using ortho rectified Landsat ETM+IMAGES on a scale of 1:25,000.

CLASSIFICATION OF LAKES AND WATERBODIES

The classification of Wetlands finalized by Ministry of Environment and Forests Govt. of India is as follows:

"The classification system besides all the wetlands incorporates Reservoirs, Ash ponds/Cooling ponds, and abandoned Quarries."

Standard definitions of lakes and water bodies are as follows:

1. **Lakes**: Larger bodies of standing water occupying distinct basins

2. **Pond**: A small, quiet body of standing water, usually shallow enough to permit the growth of rooted plants from one shore to another.

3. Ox bow lakes/cut –off meanders

4. Waterlogged (seasonal)

5. Swamp/marsh

Besides the classification given by Ministry of Environment and Forests Govt. of India, the lakes and water bodies have been described as follows

A lake is a body of relatively still fresh or salt water of considerable size, localized in a basin that is surrounded by land. Lakes are inland and not part of the ocean, and are larger and deeper than ponds. Lakes can be contrasted with rivers or streams, which are usually flowing. However most lakes are fed and drained by rivers and streams.

Natural lakes are generally found in mountainous areas, rift zones, and areas with ongoing glaciations. Other lakes are found in endorheic basins or along the courses of mature rivers. In some parts of the world there are many lakes because of chaotic drainage patterns left over from the last Ice Age. All lakes are temporary over geologic time scales, as they will slowly fill in with sediments or spill out of the basin containing them.

Many lakes are artificial and are constructed for industrial or agricultural use, for hydro-electric power generation or domestic water supply, or for aesthetic or recreational purposes.

The word lake comes from Middle English lake ("lake, pond, waterway"), from Old English lacu ("pond, pool, stream"), from Proto-Germanic*lakō ("pond, ditch, slow moving stream"), from the Proto-IndoEuropean root*leg' ("toleakdrain")Cognatesinclude Dutch laak ("lake , pond, ditch"), Middle LowGerman lāke ("water pooled in ariverbed,puddle"), German Lache ("pool,puddle")and Icelandic lækur ("s low flowing stream"). Also related are the English words leak and leach.

There is considerable uncertainty about defining the difference between lakes and ponds, and no current internationally accepted definition of either term across scientific disciplines or political boundaries exists.[For example, limnologists have defined lakes as water bodies which are simply a larger version of a pond, which have wave action on the shoreline or where wind-induced turbulence plays a major

role in mixing the water column. None of these definitions completely excludes ponds and all are difficult to measure. For this reason there has been increasing use made of simple size-based definitions to separate ponds and lakes. One definition of lake is a body of water of 2 hectares (5 acres) or more in area however others have defined lakes as waterbodies of 5 hectares (12 acres) and above or 8 hectares (20 acres) and abov] (see also the definition of "pond"). Charles Elton, one of the founders of ecology, regarded lakes as waterbodies of 40 hectares (99 acres) or more.The term lake is also used to describe a feature such as Lake Eyre, which is a dry basin most of the time but may become filled under seasonal conditions of heavy rainfall. In common usage many lakes bear names ending with the word pond, and a lesser number of names ending with lake are in quasi-technical fact, ponds. Ponds and lakes are very similar. Both are small bodies of water, either natural or man-made, that are completely surrounded by land. The primary difference between the two is their size. Simply put, lakes are larger and ponds are smaller. However, there is no standardization of lake sizes. Some sources claim lakes are bodies of water larger than 2 acres. In Montana, the minimum water surface area of a lake is 20 acres. But since the size water body isn't a clear indicator, here are a few more factors to consider:

- Generally, a lake is an area of open, relatively deep water that is large enough to produce a wave-swept "washed" shoreline, which can prevent vegetation from growing along the shore.
- Another difference can be seen in the water's temperature. Lakes, because they are deeper, have a stratified temperature structure that depends on the season. During summer months three distinct layers develop: The top layer stays warm. The middle layer drops dramatically. The bottom layer

is the coldest. Ponds, on the other hand, have a more consistent temperature throughout.

- If the water is deep enough that light does not penetrate to the bottom, and photosynthesis is limited to the top layer, the body of water is considered a lake.
- A pond is a body of water shallow enough to support rooted plants. Many times plants grow all the way across a shallow pond. There is little wave action and the bottom is usually covered with mud. Plants can, and often do, grow along a pond's edge.
- Even in cold climates, most lakes are large enough so that they don't freeze solid, unlike ponds.
- Finally, if the lake is large enough, it can affect the surrounding climate, whereas ponds are usually affected by the surrounding climate.

In lake ecology the environment of a lake is referred to as lacustrine. Large lakes are occasionally referred to as "inland seas," and small seas are occasionally referred to as lakes, such as Lake Maracaibo, which is actually a bay.

Distribution of lakes

The majority of lakes on Earth are fresh water, and most lie in the Northern Hemisphere at higher latitudes. More than 60 percent of the world's lakes are in Canada this is because of the deranged drainage system that dominates the country.

Finland is known as The Land of the Thousand Lakes, (actually there are 187,888 lakes in Finland, of which 60,000 are large), and the U.S. state of Minnesota is known as The Land of Ten Thousand Lakes. The license plates of the Canadian province of Manitoba used to claim100,000

lakes as one-upmanship on Minnesota, whose license plates boast of its 10,000 lakes.

Most lakes have at least one natural outflow in the form of a river or stream, which maintain a lakes's average level by allowing the drainage of excess water. Some do not and lose water solely by evaporation or underground seepage or both. They are termed endorheic lakes.

Many lakes are artificial and are constructed for hydro-electric power generation, aesthetic purposes, recreational purposes, industrial use, agricultural use or domestic water supply.

Evidence of extraterrestrial lakes exists; "definitive evidence of lakes filled with methane" was announced by NASA [as returned by the Cassini Probe observing the moon Titan, which orbits the planet Saturn

Origin of natural lakes

There are a number of natural processes that can form lakes. A recent tectonic uplift of a mountain range can create bowl-shaped depressions that accumulate water and form lakes. The advance and retreat of glaciers can scrape depressions in the surface where water accumulates, example of such lakes are Kousarnag, Tarsar, Marsar, etc

Lakes can also form by means of landslides or by glacial blockages.such as Gangabal ,Kishansar ,Vishansar and Nagputan lakes

Salt lakes (also called saline lakes) can form where there is no natural outlet or where the water evaporates rapidly and the drainage surface of the water table has a higher-than-normal salt content. Examples of salt lakes include, Pangong lake.

Small, crescent-shaped lakes called oxbow lakes can form in river valleys as a result of meandering. The slow-moving river forms a sinuous shape as the outer side of bends are eroded away more rapidly than the inner side. Eventually a horseshoe bend is formed and the river cuts through the narrow neck. This new passage then forms the main passage for the river and the ends of the bend become silted up, thus forming a bow-shaped lake. Examples of such lakes are Waskur Ahansar ,Khushalsar and Gilsar lakes etc

Crater lakes are formed in volcanic craters and calderas which fill up with precipitation more rapidly than they empty via evaporation. Sometimes the latter are called caldera lakes, although often no distinction is made. An example is Dal and Wular Lakes

Gloe Lakes are freshwater lakes that have emerged when the water they consists of has been separated, not considerably long before, from the sea as a consequence of post-glacial rebound.

Some lakes, such as Lake Jackson in Florida, USA, come into existence as a result of sinkhole activity.

Lake Vostok is a sub glacial lake in Antarctica. The pressure from the ice atop it and its internal chemical composition mean that, if the lake were drilled into, a fissure could result that would spray somewhat like a geyser.

Most lakes are geologically young and shrinking since the natural results of erosion will tend to wear away the sides and fill the basin. Exceptions are those such as Lake Baikal and Lake Tanganyika that lie along continental rift zones and are created by the crust's subsidence as two plates are pulled apart. These lakes are the oldest and deepest in the world. Lake Baikal, which is 25-30 million years old, is deepening at a faster rate than it is being filled by erosion

and may be destined over millions of years to become attached to the global ocean. The Red Sea, for example, is thought to have originated as a rift valley lake.

Types of Lakes

Peri-glacial Lake: Part of the lake's margin is formed by an ice sheet, ice cap or glacier, the ice having obstructed the natural drainage of the land e.g Keger tso in ladakh.

Sub-glacial Lake: A lake which is permanently covered by ice. They can occur under glaciers, ice caps or ice sheets e.g Drung drung ,Shafat glacial lakes in Zanskar .

Glacial Lake: A lake with origins in a melted glacier, such as Sheeshnag lake.

Artificial Lake: A lake created by flooding land behind a dam, called an impoundment or reservoir, by deliberate human excavation, or by the flooding of an excavation incident to a mineral-extraction operation such as an open pit mine or quarry. e.g Harwan reservoir,Yusmarg reservoir.

Endorheic Lake(terminal or closed): A lake which has no significant outflow, either through rivers or underground diffusion. Any water within an endorheic basin leaves the system only through evaporation or seepage. These lakes, such as Tsomorori in Ladakh.Such lakes are most common in desert locations.

Meromictic Lake: A lake which has layers of water which do not intermix. The deepest layer of water in such a lake does not contain any dissolved oxygen. The layers of sediment at the bottom of a meromictic

lake remain relatively undisturbed because there are no living aerobic organisms.

Fjord Lake: A lake in a glacially eroded valley that has been eroded below sea level.

Oxbow Lake: A lake which is formed when a wide meander from a stream or a river is cut off to form a lake. They are called "oxbow" lakes due to the distinctive curved shape that results from this process.e.g Hokarsar , Haigam etc

Rift Lake or sag pond: A lake which forms as a result of subsidence along a geological fault in the Earth's tectonic plates. Examples include the Tsomorori and Pangong lakes in Ladakh.

Underground Lake: A lake which is formed under the surface of the Earth's crust. Such a lake may be associated with caves, aquifers or springs.

Crater Lake: A lake which forms in a volcanic caldera or crater after the volcano has been inactive for some time. Water in this type of lake may be fresh or highly acidic, and may contain various dissolved minerals. Some also have geothermal activity, especially if the volcano is merely dormant rather than extinct.

Lava Lake: A pool of molten lava contained in a volcanic crater or other depression. Lava lakes that have partly or completely solidified are also referred to as lava lakes.

Former: A lake which is no longer in existence. Such lakes include prehistoric lakes and lakes which have permanently dried up

through evaporation or human intervention. Bodsar, is an example of a former lake..

Ephemeral Lake: A seasonal lake that exists as a body of water during only part of the year.

Intermittent Lake: A lake with no water during a part of the year.

Shrunken: Closely related to former lakes, a shrunken lake is one which has drastically decreased in size over geological time. Barinambal, Kushhalsar,Anchar,Gilsar,Hokarsar,Haigam etc, are good examples of a shrunken lake.

Eolic Lake: A lake which forms in a depression created by the activity of the winds.

Lake characteristics

Lakes have numerous features in addition to lake type, such as drainage basin (also known as catchment area), inflow and outflow, nutrient content, dissolved oxygen, pollutants, pH, and sedimentation

Changes in the level of a lake are controlled by the difference between the input and output compared to the total volume of the lake. Significant input sources are precipitation onto the lake, runoff carried by streams and channels from the lake's catchment area, groundwater channels and aquifers, and artificial sources from outside the catchment area. Output sources are evaporation from the lake, surface and groundwater flows, and any extraction of lake water by humans. As climate conditions and human water requirements vary, these will create fluctuations in the lake level.

Lakes can be also categorized on the basis of their richness in nutrients, which typically affect plant growth. Nutrient-poor lakes are said to be oligotrophic and are generally clear, having a low concentration of plant life. Mesotrophic lakes have good clarity and an average level of nutrients. Eutrophic lakes are enriched with nutrients, resulting in good plant growth and possible algal blooms. Hypertrophic lakes are bodies of water that have been excessively enriched with nutrients. These lakes typically have poor clarity and are subject to devastating algal blooms. Lakes typically reach this condition due to human activities, such as heavy use of fertilizers in the lake catchment area. Such lakes are of little use to humans and have a poor ecosystem due to decreased dissolved oxygen.

Due to the unusual relationship between water's temperature and its density, lakes form layers called thermoclines, layers of drastically varying temperature relative to depth. Fresh water is most dense at about 4 degrees Celsius (39.2 °F) at sea level. When the temperature of the water at the surface of a lake reaches the same temperature as deeper water, as it does during the cooler months in temperate climates, the water in the lake can mix, bringing oxygen-starved water up from the depths and bringing oxygen down to decomposing sediments. Deep temperate lakes can maintain a reservoir of cold water year-round, which allows some cities to tap that reservoir for deep lake water cooling.

Since the surface water of deep tropical lakes never reaches the temperature of maximum density, there is no process that makes the water mix. The deeper layer becomes oxygen starved and can become saturated with carbon dioxide, or other gases such as sulfur dioxide if there is even a trace of volcanic activity. Exceptional events, such as earthquakes or landslides, can cause mixing which rapidly brings the deep layers up to the surface and release a vast cloud of gas which lay

trapped in solution in the colder water at the bottom of the lake. This is called alimnic eruption. An example is the disaster at Lake Nyos in Cameroon. The amount of gas that can be dissolved in water is directly related to pressure. As deep water surfaces, the pressure drops and a vast amount of gas comes out of solution. Under these circumstances carbon dioxide is hazardous because it is heavier than air and displaces it, so it may flow down a river valley to human settlements and cause mass asphyxiation.

The material at the bottom of a lake, or lake bed, may be composed of a wide variety of inorganic, such as silt or sand, and organic material, such as decaying plant or animal matter. The composition of the lake bed has a significant impact on the flora and fauna found within the lake's environs by contributing to the amounts and the types of nutrients available.

A paired (black and white) layer of the varved lake sediments correspond to a year. During winter, when organisms die, carbon is deposited down, resulting to a black layer. At the same year, during summer, only few organic materials are deposited, resulting to a white layer at the lake bed. These are commonly used to track past paleontological events.

Limnology

Limnology is the study of inland bodies of water and related ecosystems. Limnology divides lakes into three zones: the littoral zone, a sloped area close to land; the photic or open-water zone, where sunlight is abundant; and the deep-water profundal or benthic zone, where little sunlight can reach. The depth to which light can reach in lakes depends on turbidity, determined by the density and size of suspended particles. A particle is in suspension if its weight is less than the random turbidity forces acting

upon it. These particles can be sedimentary or biological in origin and are responsible for the color of the water. Decaying plant matter, for instance, may be responsible for a yellow or brown color, while algae may cause greenish water. In very shallow water bodies, iron oxides make water reddish brown. Biological particles include algae and detritus. Bottom-dwelling detritivorous fish can be responsible for turbid waters, because they stir the mud in search of food. Piscivorous fish contribute to turbidity by eating plant-eating (planktonivorous) fish, thus increasing the amount of algae. The light depth or transparency is measured by using a Secchi disk, a 20-cm (8 in) disk with alternating white and black quadrants. The depth at which the disk is no longer visible is the Secchi depth, a measure of transparency. The Secchi disk is commonly used to test for eutrophication ecosystems A lake moderate surrounding region's temperature and climate because water has a very high specific heat capacity (4,186 $J \cdot kg^{-1} \cdot K^{-1}$). In the daytime a lake can cool the land beside it with local winds, resulting in a sea breeze; during the night it can warm it with a land breeze.

How lakes disappear

The lake may be infilled with deposited sediment and gradually become a wetland such as a swamp or marsh. Large water plants, typically totos, accelerate this closing process significantly because they partially decompose to form peat soils that fill the shallows. Conversely, peat soils in a marsh can naturally burn and reverse this process to recreate a shallow lake. Turbid lakes and lakes with many plant-eating fish tend to disappear more slowly. A "disappearing" lake (barely noticeable on a human timescale) typically has extensive plant mats at the water's edge. These become a new habitat for other plants, like peat moss when conditions are right, and animals, many of which are very rare. Gradually the lake closes and young peat may form, forming

a fen. In lowland river valleys where a river can meander, the presence of peat is explained by the infilling of historical oxbow lakes. In the very last stages of succession, trees can grow in, eventually turning the wetland into a forest.

Some lakes can disappear seasonally. These are called intermittent lakes and can be found in karstic terrain. A prime example of an intermittent lake is Sanasar Lake.

Sometimes a lake will disappear quickly. On 3 June 2005, in Nizhny Novgorod Oblast, Russia, a lake called Lake Beloye vanished in a matter of minutes. News sources reported that government officials theorized that this strange phenomenon may have been caused by a shift in the soil underneath the lake that allowed its water to drain through channels leading to the Oka River.

The presence of ground permafrost is important to the persistence of some lakes. According to research published in the journal Science ("Disappearing Arctic Lakes", June 2005), thawing permafrost may explain the shrinking or disappearance of hundreds of large Arctic lakes across western Siberia. The idea here is that rising air and soil temperatures thaw permafrost, allowing the lakes to drain away into the ground.

Some lakes disappear because of human development factors. The shrinking Anchar,Barinambal,Rakhiarth,Parihaspur nambal ,Hokarsar, Haigam are some of the good examples.

OBJECTIVE OF THE STUDY

- Identify the name of the un-named water-body as most of the water-bodies are without name.-
- Status of the water-body; At present whether the lake/ water-body does exist or not as many of them have been reclaimed especially Wullar Lake, Mirgund Jhil, part of the Hokersar lake etc.

USER PERSPECTIVE

The directory of Lakes and Water bodies has been prepared with the intention that ground situation has undergone a great change due to urbanization, climatic change and other factors. With regard to the information regarding present inventory of the status of Lakes and Water bodies has been generated using latest satellite data.

The following departments can be beneficiary of the findings of this report:

1. Agriculture Deptt.
2. Fisheries Deptt.
3. Irrigation and Flood control Deptt.
4. Wild life Deptt.
5. Tourism Deptt.
6. Forest Deptt.
7. Horticulture Deptt.
8. Planning Deptt.
9. PDC Deptt.
10. PHE Deptt.

STUDY AREA

The present study which involves mapping of lakes and water bodies using remote sensing technology and GIS is first of its kind ever published in the state.

The present study covers the Jammu and Kashmir Region in first phase. The mapping on a scale of 1:25,000 with required field verification/check of Jammu region and Kashmir valley has been completed and incorporated in the present report .Ladakh Region will be taken up in second phase.

LAKES AND WATERBODIES OF JAMMU & KASHMIR REGION

Jammu And Kashmir State is well known for its charming scenery. There are beautiful springs, lakes, rivers and their tributaries. All these add to its scenic beauty. The lakes of Kashmir valley are bounded on all sides by Himalayan Mountains. These lakes are irreplaceable natural water bodies aboding a rich and diverse gene pool.The valley is having numerous lakes and wetlands at different altitudes which are divided into two categories

1) High altitude lakes (Gangabal,Vishan Sar, Kishan Sar, Sheesh Nag, Nilnag, Kauser Nag etc)
2) Valley lakes (Wullar, Dal, Manasbal, Aanchar, Ahansar, Hokersar, Haigam etc.)

These fresh water lakes play an important role in the socio-economic set up of the valley and no doubt due to over exploitation of natural resources by way of human interference, these lakes and their

catchment areas are under great stress. The lakes of Kashmir valley have always served as enchanting recreational areas. In recent times the water bodies have come under a vicious two prolonged attack. One is in the form of overexploitation and the other environmental pollution, where in the first has added and abated the other whish has resulted in total extinction or eutrophic status to the lakes.

The main causes of the deterioration of the lakes are as follows:

- Indiscriminate cutting of surrounding vegetation thus increasing silt and nutrient load in the lake body
- Disposal of sewage and domestic wastes.
- Excessive use of pesticides and insecticide in the catchment,
- Agriculture practices in and around the waterbodies using agrochemicals.

PROMINENT LAKES OF KASHMIR DIVISION

WULAR LAKE

Wular Lake is one of the largest fresh water lakes of Asia. It plays a significant role in the hydrographic system of Kashmir valley and act as a huge absorption basin for the annual flood waters. Wular with its extensive surrounding marshes is the natural habitat for wild life. It is also an important fish resource accounting for about 60% of the total fish production in the state. It is the source of sustenance for a huge chunk of human population living along its fringes. On the basis of its high biological, hydrological and socio-economic value, the lake has been declared as a wetland of national importance under the wetlands programme of the Ministry of Environment and Forests, Government of

India in 1986 and has been subsequently declared as Ramsar Site in 1990 to give it the status of wetland of International importance.

The lake is situated at a distance of about 50 kms from Srinagar at an average altitude of 1570m amsl. The lake is balloon shaped with a maximum length of 16 kms and breadth of 7.6 kms with an average depth of 5.8m. In the north and east the lake is surrounded by high mountain ranges which are fairly dense conifer forests and pastures.

Besides Jhelum which passes through the lake, the lake is directly fed by two important streams of Erin and Madhumati. As per directory of Wetlands in India (MOEF) the area of the lake has been shown 189 sq km, whereas the area as per the Survey of India Maps of 1978 the lake area is shown as 58.7 sq km during lean period. However the lake area appears empirically 173 sq kms during peak flow as per the highest flood level of 1579 m recorded by Irrigation and flood control Department, Kashmir in the same year. As per the revenue records the area of the lake is shown to be 130 sq.kms.

With regard to the associated/adjacent marshes of Wular Lake there is remarkable alteration and the area has got reduced by more than **41 sq km** during the past 100 years. As per the Survey of India map of 1911 the open water area of Wular Lake was **91.29 sq km** which got reduced to **79.82 sq km** area in 1965 as per Survey of India map of 1965 and presently the open water area of the lake as per LISS+PAN merged satellite image of 2007 of Wular area is **75.23 sq km**. Similarly the wetland area surrounding the lake body and in the adjacent area was **66.45sq km** and **58.67** sq km respectively in 1911 (Survey of India map) out of which we have lost **54.97sq km** in and around the Wular Lake and **41 sq km** in its surrounding marshes to Agriculture/Horticulture and plantation etc during the past 100 years.

DAL LAKE

It is a world famous lake lying east of Srinagar city. It is Kidney shaped with an area of 11.20 Sq.kms. as determined through the satellite imageries of the year 1994 and 1995. The area determined through G.T. sheets of 1965 survey is 15.86 Sq.kms. The area figure adopted for Dal is 11.20 sq. kms.

AHANSAR LAKE

Ahansar Lake is a rural water body situated at a distance of about 30kms from Srinagar city. The Ahansar is one of the fresh water wetlands situated in the flood plains of river Jhelum. It is an ox bow type of water body and has probably originated by the meandering of the alluvial deposits. The exact age and origin of the lake is not known. Although it is thought that as a result of earthquake a crate is formed and in meanwhile that crate got filled up with water from river Jhelum.

ANCHAR LAKE

Anchar lake, a shallow water body which is located 10 Kms north-west of Srinagar city at an altitude of 1585 m.a.s.l. The lake is a typical sub urban eutrophic water body with both rural and urban charactertics in a typical rural environment. The lake is a single basined, open drainage type water body fed by a network of channels from the Sind nallah. A small channel connects Anchar Lake with Khushal sar lake which in turn is connected with the Nigin lake. The lake is also fed by the springs in the basin and along the periphery. Further a number of channels from agricultural fields, effluents from the settlements and surface runoff from the catchment area, directly drains into it through out the year. The lake outfalls in river Jhelum at Sangam on its north-east direction. The lake

covers an area of 680 hectares, half of which has now completely become marshland.

NILNAG LAKE

Nilnag lake is a fresh water lake situated at a distance of about 41 Kms to the west of Srinagar city. The exact age of the lake is not known, although Zutshi 1980 reports it to of Pleistocene origin and has probably come into existence due to tectonic activity. The water body is about 7 meters deep and is fed by two main streams on its north western side. The water level in the lake is regulated by the two outlets on its south eastern side through which excess water is drained out.

SHIEKHSAR LAKE

Sheikhsar Lake is a shallow fresh water closed type single basined valley lake located near Sumbal at a distance of 26 Kms North West of Srinagar. The lake covers an area of 28 hac with a maximum depth of 1.8 m. The agricultural runoff and disposal of the village are discharged directly into the lake. The lake supports a rich macrophytic growth.

WASKURSAR LAKE

This is a small water body situated at a distance of 30 Kms from Srinagar city and is located in Ganderbal tehsil. The lake is a semi-drainage type having an outflow channel and no inflow channel. The water retention time is high in the water body. The lake is mainly fed by springs within the lake body and in its periphery. The lake lies in the flood plains of river Jhelum.

MANASBAL LAKE

It is situated about 30 kilometers north west of Srinagar in the direction of Wular Lake and is connected with Jhelum river by a canal. It

is oblong in shape in east west direction. It is about 4.5 kms in length and about 300 meters in width.

NILNAG LAKE

It is an oval shaped small lake and 19 meters in length and about 18 meters width on the southern side of Kashmir valley, about 6 Kms from Charari-Sharif

NILSAR LAKE

A small lake in the Panjal range formed by Glacial action about one and a half Kms long and 1 Km broad.

KOUNSARNAG (KONSAR NAG) LAKE

This mountain lake lies between the peaks of Panjal range in the extreme south west of Kashmir Valley. It is about 3.5 Kms long and 2 Kms broad.

CHANDASAR LAKE

It is the small lake lying on the high mountains in between Kashmir valley and Sind River. The lake is circular in shape with 0.5 km in diameter and is situated about the south- west end of Zajimarg .

DEMANSAR LAKE

A mountain lake in the south of Kashmir valley just east of Tosha Maidan pass at the upper end of Tsenimarag and area of the lake is 16.25 hec.

DIDUFNAG LAKE

This lake lies on the eastern side of the chain of mountains between Khompara, Merdwa Wardan.

GADITAR LAKE

A mountain lake lying on the eastern side of Panjal Range about Tosh Maidan on the Poonch path.

GADSAR LAKE

A small lake known as Yemsar lies in between lofty mountains of Sind valley and Tilail. It is a tarn oval shaped about 1 Km in length. This is a high altitude lake in the north-west to south-east direction on the Sind Tilail pass.

GANGABAL LAKE

It is a high altitude lake on the north- east slopes of Harmukh mountains at an elevation of 12000 ft. the lake is about 2 Kms long and about 300 meters wide. It is about 45 Kms north of Srinagar on way of Wangat village .

GOGISAR LAKE

A mountain lake lying on the eastern side of the watershed between Kashmir and Mardwa Wardwan valley.

GUMSAR NAG

A small lake situated near Shipkour .

MARSAR LAKE

A high altitude lake situated on the southern side of high mountains forming a watershed between Kashmir and Sind Valley. This lake is about 2.5 Kms long and about 1 km wide. This lake is source of Dachigam Nallah .

SHISHNAG LAKE (OR SHESHNAG)

It is a small lake, situated at the north- eastern side of Dachnipora in a long valley enclosed by high mountains. The lake Shishnag is about 2 Kms long and 1 Km broad. It is connected with another lake called Zamtinag fed by a vast glacier.

SONASAR NAG LAKE

A small lake situated amid of the mountains at the north eastern end of Dachnipora about 3.5 Kms south- west of Shishnag. It is midway between Phalgam and Sukins villages in Mardwa Wardwan valley.

RATANSAR LAKE

It is a small lake lying in the plains at the southeast end from sopore.

TARSAR LAKE

It is a high mountain lake situated between Sindh valley and Kashmir.

VETHNAR LAKE

It is a shallow lake situated on the left bank of river Jhelum about 4.5 Kms south- east of Srinagar city. The lake is also called Nagat Nambal.

VISHANSAR LAKE

This lake is situated between Tilail and Sindh valley amidst of high mountains. It is bear shaped lake with 1.5 Kms length and 0.5 Kms .

ZAMTINAG LAKE

A small lake situated in lofty mountains at the north eastern end of Dachnipora village fed by glaciers.

KOUNNAG LAKE

A small lake lying to the north-west of Schkach mountain close to the pass between Astan Marag and Panjtarni valleys.

NARKURA SAR

The waterbody owes its name to the Narkura village, which lies to its south. The waterbody has its banks spread upto a number of villages viz; Nadur, Gurvaith, Omipora and Humhama .

ACHABAL SPRING

It is the largest magnificent spring of Kashmir which rises at the foot of the Achabal Thung mountains The main stream being carried through a garden which has been built by the Emperor Shah Jehan and is a famous tourist destination.

ANANTNAG SPRING

The name of the spring has been derived from Anat Nag or Ananta Nag, the spring of Anant , the serpent of Vishnu, and the emblem of eternity, and is a esteemed sacred of the Hindus**.**

KANTAR NAG

A small lake situated on the Pirpanjal range to the north of the Firozepur pass and is 6 kms from Gulmarg.

KAUSAR NAG

It is an high altitude lake lying between the basaltic peaks of the pirpanjal range at the south west of the Kashmir in Kulgam district. Its length is about 2 miles and its breadth is about one and a half mile. The surface of the water is dark and dull looking and has in many places the appearance of great depth. The stream which is fed by this lake is Vaishau nalla

KAUN NAG

This is a small lake lying to the north west close to the pass between the Astan Marg and panjtarni valley.

KUKAR NAG

The springs are located at the foothills on the south side of the Bringi valley. These springs gushes out at six or seven places at the foothills and forms a stream equal to that of Verinag in volume and far superior in the quality of its waters which is considered the finest in Kashmir.

HOKERSAR

This wetland is located 16 kms from Srinagar on Srinagar-Baramulla road National Highway,. It is permanent and relatively a shallow water body. The main resources wetland is from Doodhanga flood channel . This wetland is a famous game reserve and famous wildlife century.

NARAQNBAGH

This lake is located about 25 km from Srinagar city. It is oxbow lake and the main source of this lake is prings within its basin.

TRIGAM SAR

This waterbody is located about 25 km to the west of Srinagar. This lake is very shallow and terbed due to heavy biotic interference due to the harvesting of fodder and plants and fishing. A part of waterbody has been converted in to a fish farm by department of fisheries**.**

MIRGUND

It is a shallow a wetland and is locate4d about 20 kms south west of Srinagar city. The main resources of this wetland are from sukhnag nalla and the water channel irrigated surrounding agriculture areas. This wetland is a popular waterfall hunting area. This is also a notified wildlife area**.**

HAIGAM JHIL

This lake is located 5 kms from sopore town and drains into wullar lake through tarozoo nalla.the main source of water to this lake is from ningli nalla and babakul .it is also a famous water fowl hunting area.

CHATLAM WETLAND

This wetland is located in pampore area and about 30 kms from Srinagar city. The source of water to this wetland is springs within the basin. It is also a resting cite for migratory water fowl having flying linkage with Dal and Hokersar in particular**.**

SHALBUGH RAKH

This wetland is temporary shallow and is located About 15kms from srinagar and is famous game reserve. The main resource tothis wetland river sindh river.

KHANPUR SAR

This is a semi drainage water body and the main re4sources is from surrounding channels.

NARKURA SAR (NADIR SAR)

This wetland is about 8kms from south west of Srinagar It is a perm anent and deep wetland And know for fishing and folder plants like nymphaea nymphoides**.**

KANTAR NAG

This is amall lake located to the nag of firopur and is about 6 kms from the gulmarg.

MARSAR

This lake is suitated on the south of the lofting mountains forming the water shed between kashmir and the sindh valley. This lake is the

source of water to Arrah river .It can be approached from the tral valley narastan zoistan, and dachigam National Park by way of Lidarwat.

SHISHNAGH

This lake is suiated in the north of eastern area of dachinpora .It is connected with the small lake Zamtinagh whi ch is fed by glaciers. This lake is held in great reverence annually visited by thousands of pilgrims on the way to the Amarnath cave.

SONASAR NAGH

This small lake is located between the mountains in the north eastern extremity of Dachninpora which is two miles south west of the shishnagh**.**

TARSAR LAKE

This lake is located amid the lofty mountains lying between the sindh valley and Kashmir .This lake can be reached by a path from the northern end of the tral valley and lidderwater**.**

VERINAG

The Verinag spring rises in an octagonal stone reservoir situated at the foot of the spur. This spring is the main source of river Jhelum . The water of the spring is very cold and of deep bluish green in colour.

VISHAN SAR

This lake is situated amid the mountains of the sindh valley and is fed by a huge glacier .It is the main source of Kishan ganga river**.**

NILSAR LAKE

A small lake in the Panjal range formed by Glacial action.

CHANDASAR LAKE

It is the small lake lying on the high mountains in between Kashmir valley and Sind river. The lake is circular in shape with 0.5 km in diameter and is situated about the south- west end of Zajimarg .

DEMANSAR LAKE

A mountain lake in the south of Kashmir valley just east of Tosha Maidan pass at the upper end of Tsenimarag .

GADSAR LAKE

A small lake known as Yemsar lies in between lofty mountains of Sind valley and Tilail. It is a tarn oval shaped about 1 Km in length. This is a high altitude lake in the north-west to south-east direction on the Sind Tilail pass.

PROMINENT LAKES OF JAMMU DIVISION

The most prominent lakes of Jammu division are as follows:

MANSAR LAKE

Mansar lake is a very small and lies amid low hills and is about a mile in length and less than a half a mile in width but is very deep. This lake is considered a very holy place and a best tourist destination of Jammu region.

SURINSAR LAKE

It is situated to the north east of Jammu city at a distance of 40 kms. It is a fresh water warm monomictic lake with a river damming origin.

FINDINGS

The mapping of lakes and water bodies using liss III satellite data set of 2009 revealed that a total of 149 and 431 lakes are present in Jammu and Kashmir region respectively and 665 in Ladakh region. In comparison to the earlier study of the lakes and water bodies published in 1998 by Dr.Hanifa Nasim of this Directorate in which the information was generated by using SURVEY OF INDIA TOPOGRAPHICAL MAPS on a scale of 1:50,000(excluding 15 no: of SOI Topo sheets of Srinagar, Doda, Rajouri, Poonch & Anantnag Districts), the total number of lakes and waterbodies was about 1248.

The present status of some of the lakes and waterbodies which have either disappeared or have shrunken due to the human interefence and fast urbanization. The extensive field study was carried out in Jammu and Kashmir division which shows that many of the lakes which were present in 1967(refer Directory of lakes and waterbodies published in 1998) have either perished or reclaimed for different land use activity or some have disappeared due to natural causes like glacial action, low precipitation, or are on the verge of extinction as shown in different plates in the report are summarized district wise as below.

S.no	DISTRICT	NO: OF LAKES & WATERBODIES	
		SOI Toposheets of 1967	LISS III Dataset of 2009
1	Anantnag	88	98
2	Baramulla	163	124
3	Budgam	25	33
4	Doda	13	88
5	Jammu	15	15
6	Poonch& Rajouri	46	27 (22 & 5 respectively)
7	Pulwama	61	20
8	Kathua	1	1
9	Kupwara	111	66
10	Ladakh	637	665
11	Srinagar	52	74
12	Udampur	36	19

DISTRICTWISE NO OF LAKES & WATERBODIES OF J&K STATE

PRESENT STATUS OF LAKES & WATERBODIES		
District Srinagar		
S.No	**NAME OF WATERBODY**	**STATUS OF WATERBODY/LAKE**
1	Khushal Sar	Marshy
2	Gilsar	Habitation/Marshy
3	Ahansar	Marshy/Agriculture
4	Waskur	Agriculture/Marshy/Habitation
5.	Kharbagh	Marshy
6.	Khanpur	Agriculture/Marshy
7.	Shalihar.	Marshy/Agriculture
8.	Rakhi Rabitar.	Agriculture
9.	Babe Bemb.	Marshy
10.	Rakhi Kujar.	Marshy/Agriculture plantation.
11.	Anchar Lake.	Plantation/Habitation/Agriculture/ Marshy.
12.	Nagin	Marshy/Habitation
13.	Nesbal Nambal	Agriculture.
14.	Dal Lake	Marshy/Habitation Agriculture.
District Anantnag		
1.	RampurTalao	Playground
2.	Mumshahun Talao	Agriculture
3.	Gashramun Talao	Agriculture
4.	Kiel Khanun Talao	Play field
5.	Chakla Nambal	Agriculture land.

District Baramulla.		
1.	Wudin Sar	Agriculture.
2.	Tsore Teng	Seasonal
3.	Yakmanpor	Agriculture/Marshy
4.	Malipur	Marshy
5.	Panznor	Agriculture/Marshy
6	Wullar.	Marshy/ Plantation/Agriculture.
7.	Bonehar Nambal	Agriculture
8.	Khurwan Sar	Marshy/Habitation Agriculture
9.	Bod Nambal (Gadsar)	Marshy/Agriculture Horticulture
10.	Delina Dhat Nambal	Land proposal university North campus)
11.	Haigam Jhil	Agriculture/Marshy.
District Pulwama.		
1.	Bod bagh Nambal	Agriculture
2.	Rakhi Malanpur	Agriculture
3.	Thal Sar.	Marshy
4.	Chowkidar Sar.	Agriculture
5.	Buner Nambal.	Horticulture
6.	Bod Sar.	Marshy/Agriculture
7.	Drangbal Sar	Agriculture
8.	Begam bagh Nambal	Agriculture
District Budgam		
1.	Rakhi Arth	Land /Agriculture
2.	Nambli Narkur	Plantation/Agriculture /Marshy/Habitation
3.	Hoker Sar	Plantation/Agriculture/Marshy Habitation
4	Danda Pokhan	Marshy/Agriculture

District Kupwara		
1.	Buta Sar	Seasonal
2.	Tekipur	Seasonal
3.	Nonn Khan Chak.	Seasonal

COMPARATIVE STATEMENT OF LAKES & WATERBODIES

S.No	Divsion	**LISS III Dataset of 2009**
1	KASHMIR	415
2	JAMMU	150
3	LADAKH	665
TOTAL		**1230**

Glossary:

Body of water - the part of the earth's surface covered with water (such as a river or lake or ocean); "they invaded our territorial waters"; "they were sitting by the water's edge"

waterthing - a separate and self-contained entity

backwater - a body of water that was created by a flood or tide or by being held or forced back by a dam; "the bayous and backwaters are breeding grounds for mosquitos"

bay, embayment - an indentation of a shoreline larger than a cove but smaller than a gulf

channel - a deep and relatively narrow body of water (as in a river or a harbor or a strait linking two larger bodies) that allows the best passage for vessels; "the ship went aground in the channel"

drink - any large deep body of water; "he jumped into the drink and had to be rescued"

estuary - the wide part of a river where it nears the sea; fresh and salt water mix

flowage - a body of water that has been created by deliberately flooding an area; "many campsites were located near the flowage"

crossing, ford - a shallow area in a stream that can be forded

gulf - an arm of a sea or ocean partly enclosed by land; larger than a bay

high sea, international waters - the open seas of the world outside the territorial waters of any nation

hydrosphere - the watery layer of the earth's surface; includes water vapor

inlet, recess - an arm off of a larger body of water (often between rocky headlands)

lake - a body of (usually fresh) water surrounded by land

briny, main - any very large body of (salt) water

mid-water - the water that is well below the surface but also well above the bottom; "many marine fishes inhabit the mid-waters"

ocean - a large body of water constituting a principal part of the hydrosphere

offing - the part of the sea that can be seen from the shore and is beyond the anchoring area; "there was a ship in the offing"

polynya - a stretch of open water surrounded by ice (especially in Arctic seas)

puddle, pool - a small body of standing water (rainwater) or other liquid; "there were puddles of muddy water in the road after the rain"; "the body lay in a pool of blood"

river - a large natural stream of water (larger than a creek); "the river was navigable for 50 miles"

sea - a division of an ocean or a large body of salt water partially enclosed by land

seven seas - an informal expression for all of the oceans of the world; "the old salt had sailed the seven seas"

shallow, shoal - a stretch of shallow water

sound - a large ocean inlet or deep bay; "the main body of the sound ran parallel to the coast"

stream, watercourse - a natural body of running water flowing on or under the earth

Earth's surface, surface - the outermost level of the land or sea; "earthquakes originate far below the surface"; "three quarters of the Earth's surface is covered by water"

territorial waters - the waters surrounding a nation and its territories over which that nation exercises sovereign jurisdiction

waterfall, falls - a steep descent of the water of a river

waterway - a navigable body of water

Lakes and Waterbodies of District Anantnag

S.NO	Name of The Water body	Area In Hectares	Altitude In Meters
1.	Baran sar	12.055	3960
2.	Barani sar lokut	10.204	4100
3.	Barhma Sakli Sar	1.735	3920
4.	Bhag sar	69.239	3940
5.	Bram sar	14.839	3620
6.	Budru Nag	1.704	3840
7.	Chanda Sar	12.723	3920
8.	Chandan sar	15.279	3900
9.	Chang Sar	0.955	3640
10.	Charinag	19.313	4080
11.	Charinag Nar sar	3.822	3840
12.	Chhumahai sar	18.013	3880
13.	Chhumanai Gali sar	1.573	4000
14.	Chhumanai sar	8.778	3880
15.	Chhumanai Sar Lokut	1.691	3800
16.	Chir Sar	6.899	3540
17.	Chohar nag	10.27	4000
18.	Chohar nag lokut	2.987	3940
19.	Dandabari sar	1.029	3480
20.	Dhaklar sar	31.474	3940
21.	Dod Chhiran nag	4.062	3960
22.	Dod Chhiran Nag 1	0.58	3920
23.	Dod chhiran nag-2	3.229	4000
24.	Doda Sar	5.344	4240
25.	Dont Sar	2.904	3600
26.	Drinyan Sar	1.061	3960
27.	Dudhnag	1.897	3720
28.	Gandpathar Sar	5.682	3680
29.	Gashramu taloa	0.694	1758
30.	Girsar Nag	0.846	3760
31.	Girwar Nag	1.64	3600
32.	Golia sar	21.034	3980
33.	Gonhar sar	0.301	4360
34.	Gumhar sar	2.652	3880
35.	Gurmisar	1.319	3640
36.	Handilsar	18.343	3720
37.	Hapat Sar	0.655	3600

38.	Har nag	33.462	3840
39.	Hatlara Talao	0.475	4160
40.	Hirubagwan sar	17.166	4280
41.	Hoka Sar	0.94	3720
42.	Indar sar	3.991	3920
43.	Kalkhanun talao	0.934	1758
44.	Katar nag	3.038	3760
45.	Kon nag	3.188	3560
46.	Kon Nag	4.575	3880
47.	Konnag	7.803	4080
48.	Konsar gali Sar	0.336	3720
49.	Konsar nag	129.187	3580
50.	Kotori sar	8.048	3840
51.	Laksukh sar	29.616	4040
52.	Langinal nag	5.239	3920
53.	Lokut nag	1.041	3840
54.	Lokut sar	0.219	3840
55.	Mahi Nag	0.803	3000
56.	Makru sar	2.227	3540
57.	Mawar Nag	7.168	3840
58.	Mawar Nag Lokut	4.657	3920
59.	Momshahun taloa	0.719	1758
60.	Munwar Sar	7.692	3580
61.	Nagputan Sar	2.263	3920
62.	Nagputan Sar-1	2.268	3960
63.	Nagputan sar-2	5.272	3880
64.	Nandan Sar	25.032	3840
65.	New Galacial lake (unnamed)	8.048	4040
66.	New Galacial lake (unnamed)	8.696	4100
67.	New Galacial lake (unnamed)	3.263	3900
68.	New Glacial lake	6.941	4300
69.	New Glacial Lake	0.615	3700
70.	New Glacial Lake	2.304	3740
71.	New Glacial Lake (Unnamed)	3.332	4300
72.	New Glacial Lake (Unnamed)	4.216	4300
73.	Newglacial Lake	1.79	4180

	(Unnamed)		
74.	Pamba sar	1.232	3960
75.	Rupri gali sar	5.685	3900
76.	Ruprigali Sar	10.823	4100
77.	Ruyil Nar sar	0.753	3400
78.	Ruyil sar	0.501	3480
79.	Satphukhren sar	0.387	3340
80.	Sekiwas sar	0.487	4200
81.	Shesh Nag	53.717	3600
82.	Sona Sar	16.867	3760
83.	Sona Sar	18.603	3800
84.	Sona sar lokut	0.662	3960
85.	Sorus Nag	17.248	3640
86.	Sosrin nag	0.543	3760
87.	Tar sar	84.487	3800
88.	Tson	13.409	3600
89.	Tukinhar Sar	1.859	4140
90.	Tuliyan sar	1.735	3720
91.	Vimun Sar	2.513	4200
92.	Watis sar	2.679	3560
93.	Wogabal sar	0.548	3800
94.	Wokhalbal Nar sar	1.124	3840
95.	Wunthkatsi Sar	0.703	3640
96.	Zissar Nag	2.397	4160
97.	Zissar Nag 1	4.21	4240
98.	Zissar Nag 2	0.834	3800

Lakes and Waterbodies of District Baramulla

S.No	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Ganastan sar	0.7	1580
2.	Lokpura Sar	1.5	1580
3.	Gund Jahangir Nambal	1.6	1580
4.	Shilwat sar	1.7	1580
5.	Khamina Nambal	1.9	1580
6.	Prang Nambal	2	1580
7.	Rakh Haja Nambal(Parihal)	2.1	1580
8.	Nambal	2.3	1580
9.	Lokut Mukhdamyari Nambal	3.3	1580
10.	Ganasthan Nambal	3.4	1580
11.	Naz Nar Nambal	4.1	1580
12.	Bothipur Jhil	1.4	1585
13.	Tsore teng (Marshy)	3	1588
	Tsore teng (Lake)	0.8	1588
14.	Khanpeth Nambal	1	1592
15.	Nambal	1.9	1592
16.	Yakmanpur Sar	0.7	1600

17.	Bod Nambal/Gad Sar	2.2	1630
18.	Marg Sar	0.3	1700
19.	Diwar sar	0.7	1700
20.	Anderbug sar	1.2	1800
21.	Gosai Sar	0.1	2720
22.	Athet Sar	1.1	3120
23.	Gad sar lokut	1.9	3400
24.	Sar	0.7	3600
25.	Sat sar	3.7	3640
26.	Hanti Sar	0.6	3720
27.	Sar	3.5	3760
28.	Shira sar	2.7	3780
29.	Jiji Sar	0.4	3800
30.	Tungban Sar	0.7	3800
31.	Kantar Nag	0.9	3800
32.	Duniwar Sar	1	3800
33.	Lokut Watal sar	3.5	3800
34.	Shalput Sar	4.7	3800
35.	Bod Karunpathar sar	4.9	3800

36.	Sar	0.8	3820
37.	Sar	0.3	3840
38.	Bod Hiram pathri Sar	2.5	3840
39.	Sar	0.3	3900
40.	Sar	0.3	3900
41.	Sar	1.4	3900
42.	Lokut Chhitrar Nar Sar	1.5	3920
43.	LokutKarunpathar Sar	3.6	3920
44.	Sar	0.6	3950
45.	Sar	1.1	3960
46.	Karunpathar sar	1.9	3960
47.	Lokut Chiti chhamri sar	4.3	3960
48.	Lokut Ganga Gall Sar	0.3	3980
49.	Sar	0.6	4000
50.	Sar	0.7	4000
51.	Bod Ganga Gall Sar	1.6	4000
52.	Sar	1.7	4000
53.	Nablar sar	1.7	4000
54.	Mianmarg Sar	3.5	4000

55.	Sar	0.4	4040
56.	Lokut Baib Nar Sar	1.3	4040
57.	Nilnai Sar	1	4080
58.	New lake (un named)	2.8	4080
59.	Konsar Nar	0.2	4100
60.	Kaobal Sar	3.1	4100
61.	Frozen Lake	1.6	4143
62.	Lokut Handmagar Talao	0.7	4200
63.	Lokut Handmarg Talao	0.7	4200
64.	Sar	0.9	4200
65.	Sar	1.5	4200
66.	Sar	1.5	4200
67.	Handmagar Sar	2.8	4200
68.	Handmagar Talao	3	4200
69.	Kisar sar	4.3	4200
70.	Lokut Sar	4.5	4240
71.	Sar	0.3	4250
72.	Kazi Nag	0.7	4300
73.	Sar	3	4300

74.	Sar	4.7	4317
75.	Raman Chhish Sar	0.5	4400
76.	Sar	2.9	4500
77.	Kanispora Nambal	14.8	1560
78.	Buna Naugam Nambal	175.8	1579
79.	Nambal	5	1580
80.	Shiekh sar	5.1	1580
81.	Garikhan Nambal	5.8	1580
82.	Khamina Nambal	5.9	1580
83.	khamina Nambal	6.2	1580
84.	Garikhan Nambal	6.5	1580
85.	Naz Nar Nambal	7	1580
86.	Khurwan sar (Lake)	7.8	1580
	Khurwan sar (Marshy)	6.9	1580
	Khurwan sar (Marshy)	3.8	1580
87.	Lokut Chirangpura Nambal	9	1580
88.	Chirangpura Nambal	9.9	1580
89.	Panznor Nambal	13.4	1580

90.	Ferozpur Nambal	24.3	1580
91.	Bod Mukhdamyari Nambal	26	1580
92.	Tengpora Nambal	34.3	1580
93.	Naidkhar Nambal	39.3	1580
94.	Haigam jhil	353.3	1580
95.	Tundpura Nambal	21.4	1581
96.	Sudarkut Payeen Nambal	33.2	1581
97.	**Wular Lake (Marshy)**	**9191.2**	**1581**
	Wular Lake (Lake)	**2472.3**	**1581**
98.	Mirgund jhil	29.7	1584
99.	Malikpur Sar (Lake)	4.3	1586
	Malikpur Sar (Marshy)	3	1586
100.	Wudin Sar (Lake)	2	1592
	Wudin Sar (Marshy)	9.7	1592
101.	Bod Nambal/Gad Sar	84.7	1600
102.	Sarbal sar	25.9	3560
103.	Hiram Pathri Sar	8.9	3600
104.	Vishan sar	47.7	3677
105.	Zadsar	5.4	3700

106.	Watal sar	13	3760
107.	Yamai sar	5.2	3800
108.	Gad sar	38.9	3800
109.	Kishan sar	32.9	3819
110.	Chhamar Sar	9.5	3840
111.	Salnai sar	33.9	3900
112.	Madmatti sar	38.5	3920
113.	Patalwan sar	30.2	3925
114.	Naru sar	6.9	3960
115.	Sar	7.6	3979
116.	Bod Sat Sar	7.2	3980
117.	Bod Chhitrar Nar Sar	5.4	4000
118.	Bod Chiti chhamri sar	9.7	4000
119.	Kaul sar	9.8	4000
120.	Gagar sar	5.2	4080
121.	Bod Patalwan sar	31.4	4120
122.	Lokut Handmarg Talao	6.7	4200
123.	Nichel Sar	12.9	4280
124.	Sar	6.9	4500

Lakes and Waterbodies of District Budgam

S.NO.	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Lasjan Sar	2.4	1585
2.	Gund Sar	0.8	1587
3.	Naikpura Sar	1.1	1587
4.	Natipora Nag	1.8	1587
5.	Hokarsar satellite	3.3	1590
6.	Nilnag lake	1.3	2120
7.	Shamsgund Sar	1.9	2140
8.	Sinwar sar	0.3	3740
9.	Gurwan sar lokut	0.7	3880
10.	Gurwan Sar Bod	0.7	3920
11.	Kharilab sar	1.6	3940
12.	Gurwan sar	0.7	4000
13.	Sainmarg sar	4	4020
14.	Kustur Sar	0.4	4040
15.	Kharmarg sar	1.2	4080
16.	Kahrot Sar	1	4100
17.	Chinamarg sar	1.7	4200
18.	Ashdhar Sar	0.8	4240
19.	**Hokar sar**	**99.3**	**1590**
20.	Gorteng Sar	12.1	1600

21.	**Narkur Nambal**	**307.3**	**1600**
22.	Nagabal Sar	5.9	2400
23.	Navkan Sar Lokut	10.6	3920
24.	Lokut sar	5.6	3940
25.	Navkan sar	6.8	3980
26.	Daman sar	12.1	3980
27.	Bodh Sar	42.7	3980
28.	Magru sar	6.7	4000
29.	Khara sar	7.5	4020
30.	Pam sar	26.5	4020
31.	Ainpat sar	8.4	4080
32.	Pathrisar	15.2	4080
33.	Ainpat sar bod	12.2	4100

Lakes and Waterbodies of District Doda

S.NO	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Jabor Sar	0.9	2040
2.	Shunu Sar	0.1	2600
3.	Handimandu Sar	0.2	3102
4.	Kain nag	0.7	3400
5.	kaintal-N	1	3400
6.	Shupkanjan Sar	0.7	3520
7.	Tanak Sar	1	3554
8.	kumlun N sar	0.7	3600
9.	kiar nag	0.9	3600
10.	kiar nag 1	0.9	3640
11.	Sarbal Sar	0.4	3680
12.	Brama Nag	1.2	3680
13.	Sarbal Sar-1	1.9	3680
14.	Barnaj Nag	0.4	3710
15.	Brama Nag-1	1.2	3720
16.	Prul nag-5	1.1	3780
17.	kiar nar 2	0.9	3800
18.	Prul Nag-4	0.9	3800

19.	Prul Nag-3	1.6	3830
20.	Chota Sar-1	0.6	3900
21.	Nillnar Sar	2.6	3920
22.	New Glacial Lake	1.1	3940
23.	New Glacial Lake	1.3	3960
24.	Prul Nag-2	1.4	3980
25.	Prul Nag-1	2.3	3980
26.	Gagar Nar Sar	0.5	4000
27.	Ruhar nag-2	0.8	4000
28.	Purmandal Sar	1.1	4000
29.	Sidgat sar-1	1.3	4000
30.	Sidgat sar-2	1.9	4000
31.	Sidgat sar	2	4000
32.	Gagal Nag	2.6	4000
33.	Naginpathar Sar	0.8	4040
34.	Chota nag	0.9	4040
35.	Chota Shilsar	1.3	4040
36.	Gogji sar	1.6	4040
37.	Ruhar nag-1	1.7	4040
38.	Nagdal Sar	1.9	4040

39.	Nairhoi Sar	2.3	4040
40.	Kutabal sar	2.7	4040
41.	watalhoi sar	0.6	4080
42.	Purmandal sar-1	1.4	4080
43.	Sarwal Sar	1.4	4080
44.	Driyan sar-1	2.5	4080
45.	Shilsar	2.6	4080
46.	Prul Nag	1.5	4120
47.	Kon Nag	1.3	4160
48.	Dudhar sar-1	1.6	4200
49.	Hok sar	2.3	4200
50.	Chudgal N Sar	2.4	4200
51.	Sarital sar	0.8	4230
52.	Kannar sar	0.3	4240
53.	Rangasar	1.6	4240
54.	New Glacial Lake	0.5	4260
55.	Tumulasar-3	0.5	4260
56.	Tumulasar-2	0.9	4280
57.	Tumulasar-1	2.2	4280
58.	Fariabadd nag-1	3.1	4280

59.	Tumulasar	3.2	4280
60.	Shazun nag	3.5	4280
61.	Barnal nag	2	4310
62.	Krasnala Sar	0.6	4320
63.	Malgarhu Sar-1	0.6	4360
64.	Dabhati nag	0.4	4600
65.	Chandalgad sar	4	4600
66.	Farid Bod nag-2	2.4	4640
67.	Chota sar	0.8	4800
68.	Subta Nag	2.7	4830
69.	Zarnag	10.3	3840
70.	Panesa Nag	6.8	3865
71.	Kral Sar	5.3	3920
72.	Ditap Nag	5.8	4000
73.	Sangur Sar	7.2	4000
74.	Driyan sar	7.9	4000
75.	kaplas Nag	9	4000
76.	Chumik Nag	14.1	4050
77.	khelan Nag	7.8	4051
78.	chilung Nag-1	5.9	4080

79.	saris Nag	25.9	4080
80.	chilung Nag	32.6	4120
81.	Nilgur Sar	7.5	4160
82.	Naganandar Sar	11.4	4160
83.	Hagshu Sar	22.7	4200
84.	Saras Nag	5.4	4240
85.	Fariabad nag	9.6	4280
86.	Dudhar sar	7.6	4320
87.	Malgarhu Sar	9.5	4320
88.	Kali Nag	9.9	4400

Lakes and Waterbodies of District Jammu

S.NO	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Surinsar	28.6	625
2.	Badhori Talao	0.3	415
3.	Bhulwal Talao	0.1	444
4.	Chak Bawal Talao	0.4	360
5.	Chata Talao	0.4	630
6.	Dansal Talao	0.6	400
7.	Gura Sango Talao	0.3	308
8.	Gurd Keian Talao	0.5	320
9.	Ismailpur Talao	1.3	400
10.	Keran Talao	0.2	433
11.	Kheriyan Talao	0.4	400
12.	Kot Talao	0.3	410
13.	Kurwando Talao	0.7	444
14.	Malpur Talao	0.4	360
15.	Pati Talao	0.3	400

Lakes and Water bodies of District Kargil

S.NO	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Unnamed	0.13	4240
2.	Un named	0.22	4400
3.	Un named	0.26	4240
4.	Un named	0.29	4240
5.	Un named	0.29	4200
6.	un named	0.31	4000
7.	Un named	0.34	3990
8.	Un named	0.41	3600
9.	Un named	0.43	4400
10.	Un named	0.49	4000
11.	Un named	0.51	4200
12.	Un named	0.53	4240
13.	Un named	0.53	4600
14.	un named	0.54	4000
15.	Un named	0.55	4300
16.	Un named	0.55	4400
17.	Un named	0.55	4400
18.	Un named	0.55	5400
19.	Un named	0.56	4200
20.	Un named	0.57	4800
21.	Un named	0.57	4240
22.	Un named	0.58	4200
23.	Un named	0.59	4200
24.	Un named	0.59	4300
25.	Un named	0.60	5100
26.	Un named	0.63	3800
27.	Un named	0.64	4300
28.	Un named	0.65	5000
29.	Un named	0.66	4200
30.	Un named	0.70	4800
31.	Un named	0.71	4200
32.	Un named	0.73	4300
33.	Un named	0.73	4800
34.	Un named	0.77	4200
35.	Un named	0.81	3600
36.	Un named	0.83	4800
37.	Un named	0.83	4600
38.	Un named	0.84	4400

39.	Un named	0.86	5600
40.	Un named	0.86	5600
41.	Un named	0.86	4600
42.	Un named	0.87	4300
43.	Un named	0.87	4800
44.	Un named	0.89	5400
45.	un named	0.93	3300
46.	Un named	0.94	4300
47.	Un named	0.95	4200
48.	Un named	0.98	4200
49.	Un named	0.99	4600
50.	Un named	1.00	4200
51.	Un named	1.02	5100
52.	Un named	1.02	3990
53.	Un named	1.03	4600
54.	Un named	1.05	5400
55.	Un named	1.07	4800
56.	Un named	1.11	4200
57.	Un named	1.14	5400
58.	Un named	1.16	4200
59.	un named	1.18	3840
60.	Un named	1.21	5000
61.	Un named	1.23	4200
62.	Un named	1.26	4000
63.	Un named	1.27	3800
64.	Un named	1.29	4200
65.	Un named	1.29	4300
66.	Un named	1.30	6100
67.	Un named	1.31	4200
68.	Un named	1.31	4800
69.	Un named	1.34	4200
70.	un named	1.43	3200
71.	Un named	1.43	4240
72.	Un named	1.45	4550
73.	Un named	1.45	3600
74.	un named	1.45	3300
75.	Un named	1.47	4200
76.	un named	1.48	4000
77.	Un named	1.51	4200
78.	un named	1.60	4000
79.	Un named	1.62	4200
80.	Un named	1.64	4240

81.	Un named	1.67	4800
82.	Un named	1.67	4400
83.	Un named	1.71	4800
84.	Un named	1.71	4200
85.	Un named	1.72	4400
86.	Un named	1.73	4400
87.	Un named	1.74	4200
88.	Un named	1.74	4800
89.	Un named	1.78	4200
90.	Un named	1.84	4800
91.	Un named	1.87	4200
92.	Un named	1.89	4400
93.	Un named	1.94	4550
94.	Un named	2.04	3990
95.	Un named	2.08	4550
96.	Un named	2.09	4600
97.	Un named	2.09	3600
98.	Un named	2.18	5200
99.	un named	2.19	4000
100.	Un named	2.22	4600
101.	Un named	2.28	4760
102.	un named	2.35	4000
103.	Un named	2.42	4200
104.	Un named	2.43	4200
105.	Un named	2.48	4900
106.	Un named	2.50	4400
107.	Un named	2.54	4200
108.	Un named	2.73	4800
109.	Un named	2.78	4600
110.	Un named	2.82	4200
111.	Un named	2.82	5400
112.	Un named	2.86	4200
113.	Un named	3.01	5400
114.	Un named	3.09	5400
115.	Un named	3.19	4600
116.	Un named	3.22	4600
117.	Un named	3.27	4400
118.	Un named	3.41	4800
119.	Un named	3.43	3800
120.	Un named	3.57	4800
121.	Un named	3.84	4240
122.	Un named	3.89	4000

123.	Un named	3.90	4240
124.	Un named	4.09	4000
125.	Un named	4.41	5100
126.	Un named	4.47	5100
127.	Un named	4.71	4200
128.	Un named	4.81	4241
129.	Un named	4.92	5400
130.	un named	5.07	4000
131.	Un named	5.26	5400
132.	Un named	5.30	4100
133.	Un named	5.46	3900
134.	Un named	5.57	5110
135.	Un named	7.88	4600
136.	Un named	8.03	4200
137.	Un named	8.74	4600
138.	Un named	9.24	4600
139.	Un named	9.36	4800
140.	Un named	10.77	4800
141.	Un named	11.99	4200
142.	Tso	13.15	4432
143.	Un named	32.99	4400
144.	Un named	34.54	4200

Lakes and Waterbodies of District Kupwara

S.NO	Name Of The Waterbody	Area In Hectares	Altitude Meters
1.	Teki Pur Sar	0.2	1730
2.	Maidanpura Sar	0.2	1700
3.	Sar	0.3	3720
4.	Khari Sar	0.3	1800
5.	Wanidorus Sar	0.3	1400
6.	Sar	0.4	3720
7.	Tangchak sar	0.4	1764
8.	Thundus sar	0.4	1725
9.	Doruswain Sar	0.4	1700
10.	Lokut Sar	0.4	1700
11.	Mukam shareif dar	0.4	1700
12.	Dadiwan sar	0.4	1640
13.	Phul Sar	0.4	1640
14.	Bakihakar Sar	0.4	1600
15.	Chak Nutnus Sar	0.5	1760
16.	Nagru Sar	0.5	1700
17.	Nagradnar Sar	0.5	1500

18.	Boban Sar	0.6	1820
19.	Sar	0.6	1720
20.	Sar	0.6	1700
21.	Sar	0.6	1640
22.	Harlnpur Sar	0.6	1600
23.	Bod sar	0.7	1700
24.	Gund manchar sar	0.7	1700
25.	Awatkul Sar	0.7	1600
26.	Sar	0.8	1770
27.	Tekpur sar	0.8	1731
28.	Chandigam sar	0.8	1700
29.	Hayatpur sar	0.8	1700
30.	Muqam sar	0.8	1700
31.	Dodwan Sar	0.8	1649
32.	Yamrad Sar	0.8	1540
33.	Kandogar sar	0.8	1500
34.	Gang sar	0.9	2000
35.	Buna Wadar Sar	0.9	1900
36.	Manchhe sar	0.9	1640

37.	Nagradnar Sar	0.9	1500
38.	Natnus Sar	1	1760
39.	Nurdin Khan Chak Sar	1	1700
40.	Tsaraligund Sar	1	1700
41.	Pal Nar Sar	1	1680
42.	Lasipur sar	1	1640
43.	Sogam sar	1	1640
44.	Bhagatpura Sar	1	1600
45.	Bodkut Sar	1	1600
46.	Sar	1	1600
47.	Dunwar Sar	1	1580
48.	Khaipur Sar	1.1	1700
49.	Lalpura sar	1.3	1700
50.	Redanag Sar	1.4	1700
51.	Michpur	1.4	1600
52.	Redanag	1.5	1700
53.	Rakh Shehtal	1.5	1600
54.	Natnusa Sar	1.6	1600
55.	Buta Sar	1.9	1700

56.	Charlie sar	1.9	1700
57.	Rupi sar	1.9	1640
58.	Pir sar	2.1	1640
59.	Kandi Sar	2.1	1600
60.	Bran Khudu Sar	2.2	2800
61.	Gujar patti sar	2.3	1660
62.	Nagradnar Sar	2.3	1500
63.	Narain sar	2.5	1700
64.	Nag Reddi	2.6	1817
65.	Chornar Sar	2.9	1700
66.	Kan sar	10.4	1700

Lakes and Waterbodies of District Leh

S.NO	NAME OF THE WATERBODY	AREA IN HECTARES	ALTITUDE IN METERS
1.	Un named	2.60	1400
2.	Un named	1.48	3000
3.	Un named	0.50	3100
4.	Un named	4.20	3200
5.	Un named	2.58	3270
6.	Un named	0.85	3600
7.	Un named	1.48	3700
8.	Un named	0.68	3800
9.	Un named	1.19	3800
10.	Un named	4.11	3800
11.	Un named	4.46	3800
12.	Un named	1.21	4000
13.	Un named	1.44	4000
14.	Un named	0.36	4100
15.	Un named	0.37	4100

16.	Un named	0.46	4100
17.	Un named	0.47	4100
18.	Un named	0.53	4100
19.	Un named	0.56	4100
20.	Un named	0.56	4100
21.	Un named	0.56	4100
22.	Un named	0.58	4100
23.	Un named	0.59	4100
24.	Un named	0.60	4100
25.	un named	0.65	4100
26.	Un named	0.71	4100
27.	Un named	0.71	4100
28.	Un named	0.73	4100
29.	Un named	0.85	4100
30.	Un named	0.87	4100
31.	Un named	0.92	4100
32.	Un named	1.38	4100
33.	Un named	1.53	4100
34.	Un named	2.42	4100

35.	Un named	2.42	4100
36.	Un named	2.50	4100
37.	Un named	3.00	4100
38.	Un named	3.05	4100
39.	Un named	3.12	4100
40.	Un named	3.23	4100
41.	Un named	3.34	4100
42.	Un named	3.42	4100
43.	Un named	3.51	4100
44.	Un named	3.83	4100
45.	Un named	4.02	4100
46.	Un named	2.05	4138
47.	Un named	3.30	4140
48.	Un named	0.94	4142
49.	Un named	2.03	4155
50.	un named	4.61	4155
51.	Un named	0.33	4161
52.	Un named	0.47	4161
53.	Un named	0.19	4200

54.	Un named	0.20	4200
55.	Un named	0.21	4200
56.	Un named	0.21	4200
57.	Un named	0.24	4200
58.	Un named	0.25	4200
59.	Un named	0.35	4200
60.	Un named	0.38	4200
61.	Un named	0.47	4200
62.	Un named	0.48	4200
63.	Un named	0.57	4200
64.	Un named	0.72	4200
65.	Un named	0.99	4200
66.	Un named	1.00	4200
67.	Un named	1.20	4200
68.	Un named	1.26	4200
69.	Un named	1.42	4200
70.	Un named	1.43	4200
71.	Un named	1.60	4200
72.	Un named	1.74	4200

73.	Un named	1.75	4200
74.	Un named	1.82	4200
75.	Un named	1.82	4200
76.	Un named	1.88	4200
77.	Un named	1.90	4200
78.	Un named	1.94	4200
79.	Un named	2.19	4200
80.	Un named	2.54	4200
81.	Un named	3.06	4200
82.	Un named	3.06	4200
83.	Un named	3.23	4200
84.	Un named	3.35	4200
85.	Un named	3.53	4200
86.	Un named	3.87	4200
87.	Un named	4.40	4200
88.	Un named	4.42	4200
89.	Un named	0.31	4285
90.	Un named	0.37	4285
91.	Un named	0.85	4285

92.	Lungung Tso	4.75	4285
93.	Un named	0.75	4300
94.	Un named	1.97	4345
95.	Un named	4.27	4345
96.	Un named	4.42	4345
97.	Un named	2.54	4350
98.	Un named	0.58	4384
99.	Un named	0.21	4400
100.	Un named	0.26	4400
101.	Un named	0.39	4400
102.	Un named	0.43	4400
103.	Un named	0.44	4400
104.	Un named	0.47	4400
105.	Un named	0.54	4400
106.	Un named	0.68	4400
107.	un named	0.74	4400
108.	un named	1.23	4400
109.	Un named	1.35	4400
110.	Un named	2.37	4400

111.	Un named	3.10	4400
112.	Un named	4.35	4400
113.	Keta Tso	1.00	4539
114.	Un named	0.39	4540
115.	Un named	0.85	4540
116.	Un named	0.95	4540
117.	Un named	1.12	4540
118.	Un named	2.37	4540
119.	Un named	2.79	4540
120.	Un named	0.34	4600
121.	Un named	0.52	4600
122.	un named	1.03	4600
123.	Un named	1.18	4600
124.	Un named	1.60	4600
125.	Un named	1.60	4600
126.	Un named	1.91	4600
127.	Un named	2.14	4600
128.	Un named	3.21	4600
129.	Un named	4.13	4600

130.	Un named	4.62	4600
131.	Un named	4.70	4600
132.	Un named	1.62	4634
133.	Un named	0.32	4663
134.	Un named	1.01	4664
135.	Un named	0.50	4670
136.	Un named	1.06	4744
137.	Un named	0.40	4750
138.	Un named	0.63	4750
139.	Un named	1.00	4750
140.	Un named	1.42	4750
141.	Un named	1.55	4750
142.	Un named	1.76	4750
143.	Un named	1.79	4750
144.	Un named	1.82	4750
145.	Un named	2.46	4750
146.	Un named	2.91	4750
147.	Un named	3.02	4750
148.	Un named	1.69	4754

149.	Un named	0.29	4800
150.	Un named	0.30	4800
151.	Un named	0.46	4800
152.	Un named	0.47	4800
153.	Un named	0.50	4800
154.	Un named	0.60	4800
155.	Un named	0.65	4800
156.	Un named	0.66	4800
157.	Un named	0.80	4800
158.	un named	0.93	4800
159.	Un named	1.02	4800
160.	Un named	1.03	4800
161.	Un named	1.07	4800
162.	Un named	1.24	4800
163.	Un named	1.27	4800
164.	Un named	1.28	4800
165.	un named	1.40	4800
166.	un named	1.59	4800
167.	Un named	1.60	4800

168.	un named	1.61	4800
169.	Un named	1.67	4800
170.	un named	1.68	4800
171.	Un named	1.78	4800
172.	Un named	1.82	4800
173.	un named	1.84	4800
174.	Un named	2.04	4800
175.	Un named	2.18	4800
176.	Un named	2.51	4800
177.	Un named	2.55	4800
178.	Un named	2.60	4800
179.	Un named	2.60	4800
180.	Un named	2.74	4800
181.	un named	2.86	4800
182.	Un named	2.94	4800
183.	un named	3.13	4800
184.	un named	3.28	4800
185.	Un named	3.80	4800
186.	Chu Kampo	4.39	4800

187.	Un named	4.62	4800
188.	Un named	1.63	4850
189.	Un named	1.27	4857
190.	Tsoltak Tso	4.50	4900
191.	Un named	2.27	4916
192.	Un named	0.64	4976
193.	Un named	0.51	5000
194.	Un named	0.56	5000
195.	Un named	0.57	5000
196.	Un named	0.61	5000
197.	Un named	0.74	5000
198.	Un named	0.76	5000
199.	Un named	0.91	5000
200.	Un named	0.93	5000
201.	Un named	1.42	5000
202.	Un named	1.59	5000
203.	Un named	1.67	5000
204.	Un named	1.96	5000
205.	Un named	1.97	5000

206.	Un named	2.03	5000
207.	Un named	2.06	5000
208.	Un named	2.67	5000
209.	Un named	2.68	5000
210.	Un named	4.13	5000
211.	Un named	4.89	5000
212.	Un named	0.93	5089
213.	Un named	4.91	5089
214.	Un named	0.51	5100
215.	Un named	1.69	5100
216.	Un named	4.03	5155
217.	Un named	0.35	5200
218.	Un named	0.44	5200
219.	Un named	0.63	5200
220.	Un named	0.63	5200
221.	Un named	0.66	5200
222.	Un named	0.82	5200
223.	Un named	0.86	5200
224.	Un named	0.95	5200

225.	Un named	0.96	5200
226.	Un named	1.06	5200
227.	Un named	1.10	5200
228.	Un named	1.10	5200
229.	Un named	1.29	5200
230.	Un named	1.33	5200
231.	Un named	1.46	5200
232.	Un named	1.56	5200
233.	Un named	1.73	5200
234.	Un named	1.75	5200
235.	Un named	1.76	5200
236.	Un named	1.79	5200
237.	Un named	2.24	5200
238.	Un named	2.28	5200
239.	Un named	2.36	5200
240.	Un named	2.93	5200
241.	Un named	3.05	5200
242.	Un named	3.36	5200
243.	Un named	3.44	5200

244.	Un named	3.60	5200
245.	Un named	3.64	5200
246.	Un named	4.02	5200
247.	Un named	4.04	5200
248.	Un named	2.77	5300
249.	Un named	1.57	5334
250.	Un named	1.45	5345
251.	Un named	0.19	5400
252.	Un named	0.50	5400
253.	Un named	0.54	5400
254.	Un named	0.84	5400
255.	Un named	0.93	5400
256.	Un named	1.31	5400
257.	Un named	1.86	5400
258.	Un named	1.99	5400
259.	Un named	2.22	5400
260.	Un named	2.33	5400
261.	Un named	2.36	5400
262.	Un named	2.41	5400

263.	Un named	2.80	5400
264.	Un named	2.91	5400
265.	Un named	3.02	5400
266.	Un named	3.77	5400
267.	Un named	0.91	5412
268.	Un named	2.09	5421
269.	Un named	3.19	5447
270.	Un named	1.92	5490
271.	Un named	3.58	5490
272.	Un named	1.10	5500
273.	Un named	1.36	5500
274.	Un named	2.38	5500
275.	Un named	4.84	5500
276.	Un named	4.86	5500
277.	Un named	4.61	5505
278.	Un named	1.74	5565
279.	Un named	4.41	5565
280.	Un named	2.16	5567
281.	Un named	0.62	5600

282.	Un named	0.82	5600
283.	Un named	1.06	5600
284.	Un named	1.16	5600
285.	Un named	1.20	5600
286.	Un named	1.22	5600
287.	Un named	1.43	5600
288.	Un named	1.53	5600
289.	Un named	1.60	5600
290.	Un named	1.66	5600
291.	Un named	1.71	5600
292.	Un named	1.72	5600
293.	Un named	1.75	5600
294.	Un named	2.18	5600
295.	Un named	2.24	5600
296.	Un named	2.25	5600
297.	Un named	2.31	5600
298.	Un named	2.47	5600
299.	Un named	2.56	5600
300.	Un named	2.56	5600

301.	Un named	2.64	5600
302.	Un named	3.30	5600
303.	Un named	3.58	5600
304.	Un named	3.72	5600
305.	Un named	3.93	5600
306.	Un named	4.26	5600
307.	Un named	4.67	5600
308.	Un named	2.55	5620
309.	Un named	0.45	5630
310.	Un named	1.85	5634
311.	Un named	0.65	5640
312.	Un named	4.30	5700
313.	Un named	4.66	5705
314.	Un named	4.97	5732
315.	Un named	1.47	5733
316.	Un named	3.11	5750
317.	Un named	0.11	5800
318.	Un named	0.39	5800
319.	Un named	0.56	5800

320.	Un named	0.84	5800
321.	Un named	0.89	5800
322.	Un named	0.95	5800
323.	Un named	1.22	5800
324.	Un named	1.31	5800
325.	Un named	1.37	5800
326.	Un named	1.38	5800
327.	Un named	1.74	5800
328.	Un named	1.82	5800
329.	Un named	1.85	5800
330.	Un named	2.56	5800
331.	Un named	2.66	5800
332.	Un named	2.87	5800
333.	Un named	3.40	5800
334.	Un named	3.58	5800
335.	Un named	3.99	5800
336.	Un named	4.05	5800
337.	Un named	4.68	5800
338.	Un named	0.80	5803

339.	Un named	0.54	5900
340.	Un named	0.95	5900
341.	Un named	1.65	5900
342.	Un named	1.78	5900
343.	Un named	2.71	5900
344.	Un named	0.17	6000
345.	Un named	0.32	6000
346.	un named	0.43	6000
347.	Un named	0.63	6000
348.	un named	0.74	6000
349.	Un named	0.84	6000
350.	Un named	1.08	6000
351.	Un named	1.17	6000
352.	Un named	1.29	6000
353.	Un named	1.36	6000
354.	Un named	1.78	6000
355.	Un named	1.85	6000
356.	Un named	1.91	6000
357.	un named	2.10	6000

358.	Un named	2.14	6000
359.	un named	2.54	6000
360.	Un named	2.71	6000
361.	Un named	2.99	6000
362.	Un named	3.00	6000
363.	Un named	3.19	6000
364.	Un named	3.21	6000
365.	Un named	3.64	6000
366.	Un named	3.71	6000
367.	Un named	4.12	6000
368.	Un named	4.36	6000
369.	Un named	4.71	6000
370.	Un named	0.25	6055
371.	Un named	1.50	6055
372.	Un named	1.05	6200
373.	Un named	5.00	6000
374.	Un named	5.00	4200
375.	Un named	5.06	4200
376.	Un named	5.07	4100

377.	Un named	5.18	4300
378.	un named	5.20	4800
379.	Un named	5.20	5600
380.	Un named	5.21	5100
381.	Un named	5.21	4350
382.	Un named	5.47	5200
383.	Un named	5.49	4800
384.	un named	5.52	4800
385.	Un named	5.58	5800
386.	Un named	5.59	5200
387.	Un named	5.61	5200
388.	Un named	5.68	6000
389.	Likphuk Kongonstru Tso	5.73	5421
390.	Un named	5.79	5600
391.	Un named	5.82	5159
392.	Un named	5.94	4100
393.	Un named	5.94	5600
394.	Un named	5.98	5800
395.	un named	6.08	4400

396.	Un named	6.23	5560
397.	Un named	6.25	4100
398.	Un named	6.25	5769
399.	Un named	6.31	5334
400.	Un named	6.43	5265
401.	Un named	6.44	5200
402.	Un named	6.47	4534
403.	Un named	6.49	5600
404.	Un named	6.65	5600
405.	Un named	6.66	5400
406.	Un named	6.68	4800
407.	Un named	6.68	5500
408.	Un named	6.69	5200
409.	Un named	6.75	5400
410.	Un named	6.80	5600
411.	Un named	6.83	6000
412.	Un named	6.91	5400
413.	Un named	6.91	4600
414.	Un named	6.95	4100

415.	Un named	6.97	4800
416.	Un named	7.18	4800
417.	Un named	7.29	5600
418.	Un named	7.32	5400
419.	Un named	7.35	5600
420.	Taknakpo Tso	7.44	4200
421.	Un named	7.52	5900
422.	Un named	7.57	4100
423.	Un named	7.95	5000
424.	Un named	7.97	5200
425.	Un named	8.05	5200
426.	Un named	8.06	4800
427.	Un named	8.26	4800
428.	Un named	8.32	5600
429.	Un named	8.33	4800
430.	Un named	8.36	5700
431.	Un named	8.38	6000
432.	Un named	8.49	4100
433.	Un named	8.57	4142

434.	Un named	8.62	4540
435.	Chholtak Tso	8.62	5600
436.	Un named	8.69	5091
437.	Un named	8.93	5800
438.	Tolo Tso	9.04	4200
439.	Un named	9.87	5400
440.	Un named	10.09	5800
441.	Un named	10.22	6000
442.	Un named	10.57	5900
443.	Un named	10.61	4345
444.	Un named	10.65	5600
445.	Un named	10.98	4875
446.	Un named	11.08	4200
447.	Un named	11.15	5700
448.	un named	11.24	4800
449.	Un named	11.68	5500
450.	Un named	12.55	4380
451.	Un named	12.63	5400
452.	Un named	12.81	5500

453.	Un named	12.89	5225
454.	Un named	13.07	5334
455.	Un named	13.63	4600
456.	Un named	14.21	5734
457.	Un named	14.38	5400
458.	Un named	14.51	4800
459.	Un named	14.51	4540
460.	Un named	14.54	3400
461.	Un named	15.04	4400
462.	Un named	15.20	5400
463.	Un named	15.22	5600
464.	Namda Tso	15.35	5220
465.	Un named	15.69	5600
466.	Un named	15.74	4100
467.	Skam Tiho	15.82	5000
468.	Un named	17.04	5200
469.	Togom Tso	17.16	5275
470.	Un named	17.19	5400
471.	Un named	17.31	6000

472.	Un named	17.44	4750
473.	Un named	17.93	4800
474.	Un named	19.03	5000
475.	Niyasuru Tso	19.50	4600
476.	Un named	19.77	5600
477.	Un named	20.27	5600
478.	chakartala Tso	20.56	4100
479.	Un named	20.76	4100
480.	Chakhukma Tso	21.04	4175
481.	Salsal Tso	21.54	4400
482.	Chhagayung Tso	23.76	4500
483.	Un named	25.41	4145
484.	Numa Tso	25.87	5435
485.	Un named	25.90	5375
486.	Un named	27.03	5800
487.	Un named	28.56	4600
488.	Un named	29.10	5700
489.	Gurgur Tso	32.13	5350
490.	Tavsiru Tso	32.52	5435

491.	Chhamgo Tso	33.41	4500
492.	Zebo Tso	33.51	4138
493.	Un named	33.73	5900
494.	Un named	36.56	4345
495.	Chu Kogma	39.21	4938
496.	tsoskur (Rupshu)	39.98	4130
497.	Yusuf Tso	41.87	5500
498.	Chomo Chonkar Lake	42.63	5695
499.	Un named	44.03	4750
500.	Un named	44.22	5800
501.	Un named	44.53	5200
502.	Kela Tso	45.81	5015
503.	Un named	46.98	5800
504.	Un named	62.34	5600
505.	Un named	64.30	5400
506.	Ororotse Tso	65.08	5345
507.	Un named	89.52	5600
508.	Chhot Tso	115.60	5390
509.	Yusup Tso	156.57	5400

510.	Yaye Tso	167.68	4800
511.	Kyule Tso	188.92	5400
512.	Mitpal Tso	210.65	4918
513.	Tso Kur	346.73	4100
514.	Kyun tso	460.23	4990
515.	Srartcapuk Tso	481.32	4538
516.	Azangkuru Tso	522.18	4670
517.	Kyun tso	574.48	4985
518.	Tso Kar	1725.15	4534
519.	Spanggur Tso	3585.47	4400
520.	Tso morari	14805.56	4600
521.	Pangong Tso	29093.49	4400

Lakes and Waterbodies of District Poonch

S.NO	Name Of The Water Body	Area In Hectares	Altitude In Meters
1.	ChotaJamianwali Sar	0.3	3900
2.	Janjanwali Sar	0.3	3600
3.	Un named	0.3	3760
4.	Chinarmarg Sar	0.4	3948
5.	Jara Sar 2	0.6	3820
6.	Handnal Sar	0.7	4000
7.	Ding sar	0.8	3740
8.	Jara Sar	0.8	3820
9.	Jamianwali Sar	0.9	3930
10.	Gum Sar	1.1	3720
11.	Chhamber Sar	1.2	3740
12.	Chhe sar	1.3	3620
13.	Barhal Sar	1.4	3940
14.	Gum Sar	2	3700
15.	Neel sar	2.3	3800
16.	Sar	2.5	3800
17.	Un named	4.8	3760
18.	Bhag sar	6.7	3700
19.	Katori Sar	8.6	4100
20.	Dhudwali Sar	9.7	3660
21.	Chhapar Sar	10.2	4000
22.	Sannan Sar	22.1	3920

Lakes and Waterbodies of District Pulwama

S.NO	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Drangabal Sar Lokut	0.5	1600
2.	Chhatalan Sar	0.6	1600
3.	Ech nambal	2.3	1600
4.	Kisirgam Sar	2.7	1600
5.	Drangabal Sar	2.8	1600
6.	Parigam Sar	3.5	1600
7.	Takun spring	0.5	1640
8.	Takon spring	0.9	1640
9.	Kargom sar	2	1860
10.	Panyar nag	0.9	2100
11.	Tank	0.2	2160
12.	Thal sar	0.4	2180
13.	Pambagai lake	1.6	3880
14.	Pambach khod	3.8	3880
15.	Gum sar	2	4100
16.	Pambach Gali Sar	1.1	4120
17.	Bod sar	5.8	1600
18.	Galandar Sar	5.8	1600
19.	Phashakuri Sar	6.6	1600
20.	Zanatrag Sar	6.8	1680

Lakes and Waterbodies of District Rajouri

S.NO	NAME OF THE WATERBODY	AREA IN HECTARES	ALTITUDE IN METERS
1.	Simar sar	14.2	3700
2.	Katori sar	6.3	3760
3.	Budhal Sar	6.4	4060
4.	Bela Sar	2.5	3920
5.	Margu Sar	3.1	3960

Lakes and Waterbodies of District Srinagar

S.NO.	NAME OF THE WATERBODY	AREA IN HECTARES	ALTITUDE IN METERS
1.	Nambal	0.7	1580
2.	Pahilpura Nambal	0.8	1580
3.	Nambal	1.4	1580
4.	Zadipura Nambal	0.2	1581
5.	Sadunara Nambal	0.7	1581
6.	Zadipura Nambal	0.7	1581
7.	Nambal	2	1581
8.	Hakabor Nambal	3.1	1581
9.	Nambal	0.6	1582
10.	Sar	0.6	1582
11.	Sar	0.9	1582
12.	Nambal	1	1582
13.	Bazipura Nambal	1.4	1583
14.	Nambal	3	1583
15.	Kharpora Sar	3.4	1583
16.	Naupura Nambal	1.1	1586
17.	Satsaran Sar	3.2	3680

18.	Braham Sar	0.5	3720
19.	Lokut Sar	0.9	3720
20.	Lokut Dandloo Sar	0.3	3760
21.	Bod Dandloo Sar	1.2	3760
22.	Lokut Mengandoob Sar	1.7	3760
23.	Bod Mengandoob Sar	3.3	3800
24.	Nagaberan Sar	1.1	3840
25.	Hoka Sar	1.4	3840
26.	Hoka sar 1	1.9	3840
27.	Hoka sar 2	1.3	3920
28.	Salma Sar	1.8	3955
29.	Hoka sar 3	2.1	3960
30.	Sona sar	3.5	3967
31.	Sona sar	1.1	4000
32.	Sar	1.5	4000
33.	Gumbur Sar	4.3	4013
34.	Masthokar Sar	4	4024
35.	Khamti lake	1.7	4040
36.	Sar	0.2	4080

37.	Shutiyan Nag	2.1	4080
38.	Kan Sar	4	4080
39.	Sar	0.9	4120
40.	Krim Sar	1.3	4120
41.	Darin Sar	1.5	4180
42.	Baribal sar	1.2	4200
43.	Doth Sar	0.9	4271
44.	Kana sar	5	4080
45.	Nambal	7.6	1580
46.	Zinipura Nambal	27.6	1580
47.	Rakh Malgom Nambal	48.2	1580
48.	Chak Sudarkot Bala Nambal	11.4	1582
49.	Chak Sudarkut Bala Namba	13.1	1582
50.	Babadam (Lake)	7.5	1583
	Babadam(Marsh)	0.8	1583
	Babadam(Marsh)	30.4	1583
51.	Ajas Nambal	26.7	1583
52.	Khanpur(Marshy)	35.9	1583

	Khanpur (lake)	0.7	1583
	Khanpur (lake)	5.1	1583
53.	Rakh-i-Shalabug	1508.2	1583
54.	Waskur Sar (Lake)	20.1	1584
	Waskur Sar (Lake)	0.9	1584
	Waskur Sar(Marshy)	21.5	1584
55.	Nagin (lake)	64.2	1584
	Nagin (lake)	9.5	1584
	Nagin (Marshy)	3.1	1584
	Nagin (Marshy)	32.5	1584
56.	Rakh-i-Rabitar	174.5	1584
57.	Shalhar Sar	8	1585
58.	**Dal (Lake)**	**1104.4**	**1585**
	Dal (Lake)	**7**	**1585**
	Dal (Lake)	**4.4**	**1585**
	Dal (Lake)	**4.5**	**1585**
	Dal (Lake)	**9.1**	**1585**
	Dal (Marshy)	**159.4**	**1585**

	Dal (marshy)	**28.5**	**1585**
59.	Gil Sar (Marshy)	4.2	1586
	Gil Sar (Lake)	3	1586
60.	Khushal Sar	92	1586
61.	Ahan Sar (Marshy)	14.8	1600
	Ahan Sar (Lake)	9.9	1600
62.	Nesbal Nambal	14.8	1600
63.	Sudarkut Bala Namba	61.7	1600
64.	Manasbal lake	177.2	1603
65.	**Rakh-i-Kujar**	**1482.4**	**1606**
	Anchar (lake)	**8.2**	**1606**
66.	Nund kol	36.1	3480
67.	Gangabal lake	160	3600
68.	Kilchol Sar	6.4	3667
69.	Yamhar Sar	9.9	3704
70.	Kaul sar	11.3	3760
71.	Marsar lake	44.2	3849
72.	Andurun sar	11.2	3920

73.	Lolgul sar	14.7	4000
74.	Nila nag	6.8	4240

Lakes and Waterbodies of District Udhampur

S.NO.	Name Of The Waterbody	Area In Hectares	Altitude In Meters
1.	Dhar Sar	0.600	360
2.	Chinkah Sar	1.200	576
3.	Kotla Sar	0.400	620
4.	Moto Sar	0.800	680
5.	Magain Sar	1.500	700
6.	Khad Sar	2.400	700
7.	Surman Sar	2.200	724
8.	Kopn Sar	0.300	740
9.	Darsu Sar	1.500	760
10.	Lanjan Sar	2.300	800
11.	Polar Sar	1.700	860
12.	Batnari Sar	1.500	2000
13.	Jurya Sar	1.600	3480
14.	Jurya Sar Lokut	0.600	3500
15.	Thinmarg Sar	1.400	3580
16.	Gaga Sar	2.900	3780
17.	Kaplas Sar	4.900	4000
18.	Kopn Sar -1	0.600	740
19.	Mansar	58.600	700