China Lake Association

P.O. Box 215
China, Maine 04926

CHINA LAKE WATERSHED SURVEY 2000

PRELIMINARY RESULT

SHORE FRONT SURVEY
STREAM AND TRIBUTARY SURVEY

surveyor: David Landry, CLA

China Lake Association

P.O. Box 215
China, Maine 04926

SHORE FRONT SURVEY EAST BASIN 2000

The shore front survey of the East and North Basin of China Lake was done in June of 2000 as a follow up to a shore front survey that was done in 1992. The objective of the survey was to identify sites of significant erosion that would be amenable to stabilization by the China Lake Conservation Corp and secondly to obtain an estimate of the amount of shoreline with erosion identifiable to visible inspection. Visible inspection was carried out from a motor boat or kayak within 15 feet of shore. In areas where direct visualization from the water was not possible due to overhanging vegetation the shore front was surveyed on foot.

Criteria for inclusion as an erosion site included 5 or more contiguous linear feet of erosion as noted by exposed soils or bare roots or areas of previous erosion as marked by trees in standing water. A best estimate of the amount of linear shorefront eroding was made when the sites could not be paced off. An estimate of the priority that the erosion site should have in the stabilization projects was based on 3 factors. First was the amount of exposed soils actively eroding, second was the accessibility of the site, and third was landowner interest in the cases where a landowner could be contacted. Based on these combination of factors several of the larger eroding sections were ranked lower in priority than other areas. (examples 36,37)

An estimate was made of the total eroding shore front and found to be 3161 feet. The vast majority of eroding shore front has less than 18 vertical inches of exposed soil. As a percentage of total East and North Basin shore front the actively eroding shore is estimated to be 4 percent of the total shore front. (see table 1)

A prioritized list of projects was developed for the Summer of 2000 in part from this survey and is included in *Tables Section.* The *Shore Front Survey* is only part of the ongoing analysis of the China Lake Watershed. A survey of all streams and tributaries is in progress while a survey of camp roads has previously been done.

Sites that were included in the survey were photographed with the survey date noted as well as the water level on that day. The water level is noted in relation to the dam spillway at the outlet of China Lake in East Vassalboro. For example **S.W. +4** is equal to a water level 4 inches above spillway level. All sites are noted on a map of China Lake included with this report

6/6/00 S.W. +4

This is the Baptist Beach in China Village should bank erosion due to foot traffic. Plans to reshape bank are in progress.

6/6/2000 S.W. +4
Upland erosion along the left side of camp down to docks. Needs seeded and replanted. Property on FR #2 owner Calvin Bubar 968-5362 winter address 27 Lincoln Sr , Brewer, Me **Intermediate Priority**

6/6/2000 S.W.+4

SEVERAL SITES OFF OF FIRE ROAD 4 AND 5 SHORE IS BEACH WITH MINIMAL EROSION. **LOW PRIORITY**

SITE (NO PICTURE) SAME COVE 50' UNDERCUT BANK STABILIZED WITH ROOTS AND VEGETATION **LOW PRIORITY**

6/6/200 S.W +4

THREE SITES IN WENTWORTH COVE ON THE PROPERTY OF THE BAPTIST CHURCH CAMP. THE TWO SHORE FRONT SITES ARE HIGH PRIORITY WITH ONGOING LOSS AT CURRENT WATER LEVELS. ABOUT 75 FEET OF SHORE NEED RIPRAPPED.THE OFF SHORE SITE IS AN ERODING AREA IMMEDIATELY AT THE TOP OF THE BANK AND IS MARKED BY A YELLOW RIBBON. THE DANGEROUS BRANCHES FROM THE ICE STORM ARE GONE .ROCK IS ON SITE BUT MAY BE INSUFFICIENT FOR THE PROJECT.

6/9/00 S.W.+4

Point of land extending back into Wentworth Cove has been eroding for a number of years with wave action washing over vegetation at current water levels. Much of what was land (120 square feet) has lost most of soil and is a small rock base now. Access difficult, Low Priority

6/8/00 S.W. +3

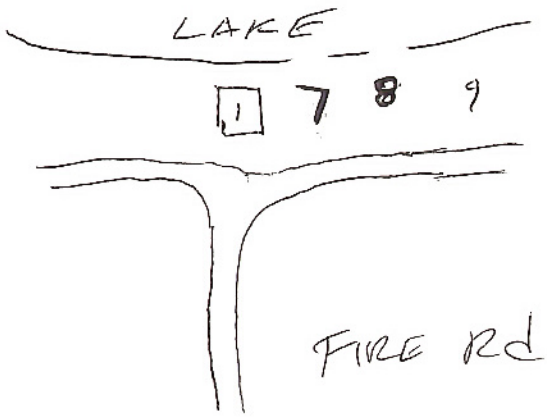
THE FOLLOWING SITES ARE ALONG FIRE ROAD #9 ACCESS IS RELATIVELY EASY TO THE SITES.

ALLEN PELLETIER SMALL AMOUNT OF EROSION AROUND LANDING. ARE INTERESTED IN RIPRAP 15 FEET INVOLVED EXTENSIVELY BUT WOULD LIKE 100 FEET OF SHOREFRONT DONE. TEL 968-2304.

ALICE KING F.R. 9 75 FEET MODERATED PRIORITY. INFORMATION SHEET LEFT AT CAMP NEIGHBORS WILL TALK WITH HER

FIRE ROAD 9- RAINCOURT CONTACTED AND INTERESTED 50 FEET ACTIVELY ERODING. **INTERMEDIATE-HIGH PRIORITY.**

SITE BELOW NEXT TO PREVIOUS 2 SITES COTTAGE ALMOST FALLING IN LAKE. THIS IS AN ARE OF ICE DAMAGE. FLYER LEFT. SEE MAP OF SITES.



① - Doug Herzman to do Rip rap himself (no picture)
7 - Alice King
8 - Raincourt
9 - unknown white with Green trim

6/9/00 S.W. +4

FIRE ROAD 10 THE FIRST SITE IS 75 FEET LONG ALONG A CAUSEWAY THAT IS NOT ACTIVELY ERODING AT CURRENT LEVELS BUT HAS ERODED IN PAST AND IS CLOSE TO WAVE ACTION . EASY ACCESS. OWNED BY LIONEL GIGUERRE. TO BE CONTACTED. **INTERMEDIATED PRIORITY.**

ERODING HILLSIDE SAME AREA, SAME OWNER 25 FEET HIGH AND 50 FEET ACROSS AT BASE NEED REVEGETATED IF POSSIBLE. **PRIORITY ?**

6/9/00 S.W. + 4

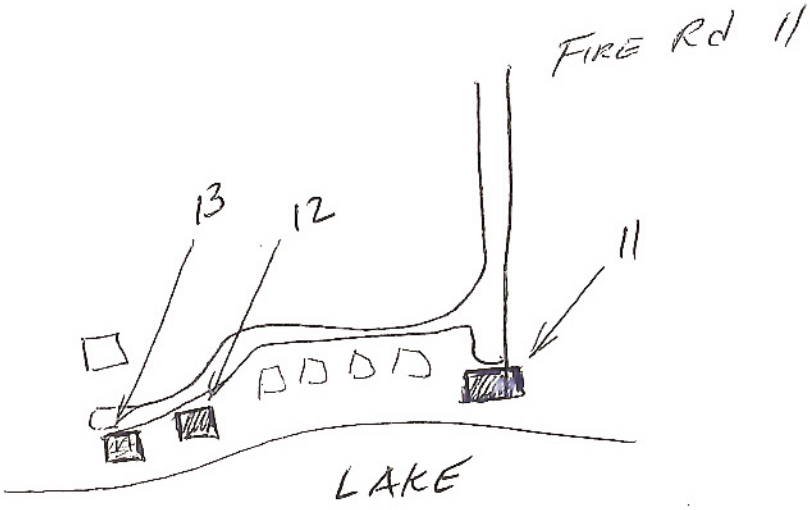
First camp in on F.R. 11 35 feet of eroding shore front with maximum bank height of 16 inches. Notice left in door.

6/9/00 S.W. + 4

Second from last camp on F.R.11 owned by Stephen King of Augusta. 25 feet of shore front erosion with upland erosion needs rip rap and plantings. Notice left. Higher Priority.

6/9/00 S.W. +4

Last camp on F.R. 11 owned by Roy Dowe of China 40 feet badly eroded bank to maximum height of 18 inches. High Priority project but spoke to owner who has little interest. He will consider.



6/9/00 S.W.+4

Property between camps on F.R. 11 and 12 unknown owner similar type of erosion. No notice left.

6/9/00 S.W. +4

Last property in on F.R. 12 falling down has what appears to be 50 feet of ice damaged shore out front with moderately significant erosion. High Priority. Notice left.

6/9/00 S.W. +4

Upland slumping of earth well above the water line does not appear to be caused by wave action. Difficult site access between F.R. 12 and 13.

6/9/00 S.W. +4

Eroding ground around Tedstone camp on FR # 18 heavy foot traffic, steep slope. Medium-low priority.

6/22/00 S.W. +5

These 3 photos show the south end of Fire Road 18 where resident Mike Ledger (207-785-3256) reports heavy silt ladden runoff onto the ice in Spring. The runoff is from 2 sources, first a well vegetated hay field about 10 acres in size, and second from the fire road itself. The water runs down a rock bottomed ditch south of the Ledger property. Fire road work is **High Priority.**

6/10/00 S.W. +3

From the lake this is the left side of Judy and Mike O'Brien at the end of the Neck Rd. There is a drainage ditch from the field that is eroded and dumping silt into the lake . May benefit from silt fence and rip rap. Tel #968-2873

6/10/00 S.W. +3

KMD property adjacent to previous site 50 feet undercut bank with some collapse.Less severe than adjacent site was. Needs some chain saw work. Surprisingly the rest of the bank in this are looks good.

6/10/00 S.W. +3

This is KWD land on the South side of passage to West Basin at current water levels the site is stable. It is generally in better shape than the photo appears and because of remote location would be difficult to address. Lower priority.

6/10/00 S.W. +3

This is KWD land immediately South of previous site. There is 200 feet of bank being slowly undercut at higher water levels or wave action than seen today (10 knot winds from the South with 8 inch waves.) The bank is well vegetated and rooted with no bare soil seen as I walked this area. Low priority

6/10/00 S.W. +3

This KMD site is an unstable upper bank caused by a large blow down barely seen at the top of slope. bare soil is 16 inches above current water levels with a large ledge below. Remote site Low Priority.

6/10/00 S.W.+3

Property of Bernard Pellerin FR #61 site of previous rip rap and revegetation now with up slope erosion fairly extensive in some places. Interested in plantings. Left info and talked with sister of owner (jackie)

6/22/00 S.W. +5

This 75 foot section is on the east side of Pine Point . These is under cut bank and exposed roots. Medium Priority.

6/22/00 S.W. +5

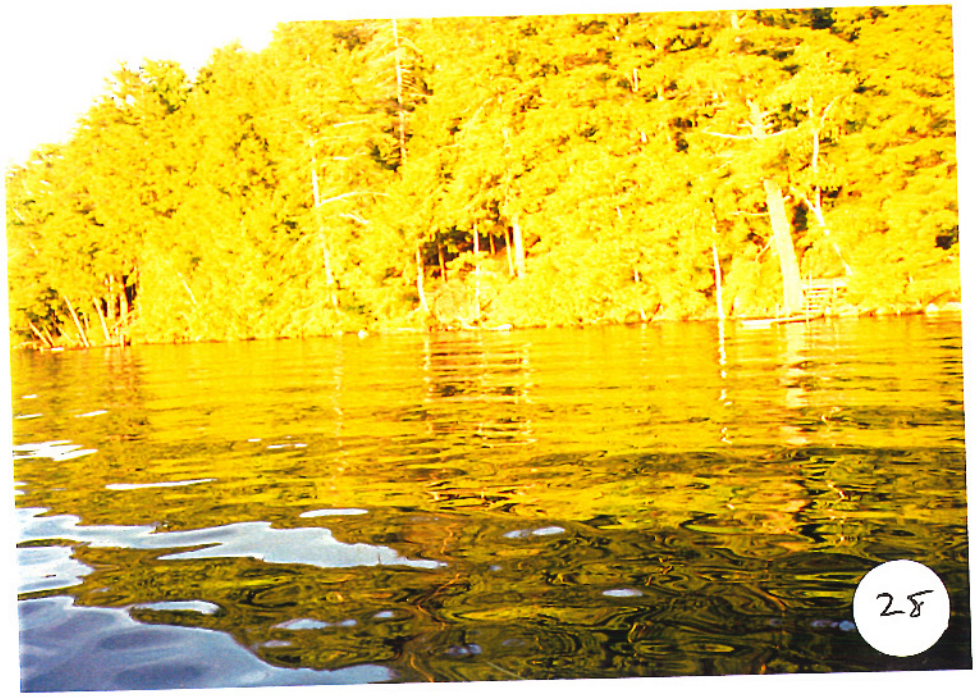
South China boat landing was survey immediately after a brief thunder storm. There was significant runoff from site into the lake with obvious turbidity of the lake near the landing. High Priority.

6/22/00 S.W. +5

This is the property of Nelson Glidden Fire Rd #57 (445-2087). There is significant upland erosion starting with the fire road and then coming down the steep bank to the lake. Some erosion along the water line. Complex set of problems with large amounts of runoff into lake give this site a High Priority.

6/22/00 S.W. +5

This 2 photo set shows 600 feet of shore North of Jenning's boathouse that shows signs of past erosion with trees and roots in water but generally good rock protection of shore. Low Priority.



6/18/00 S.W. +5

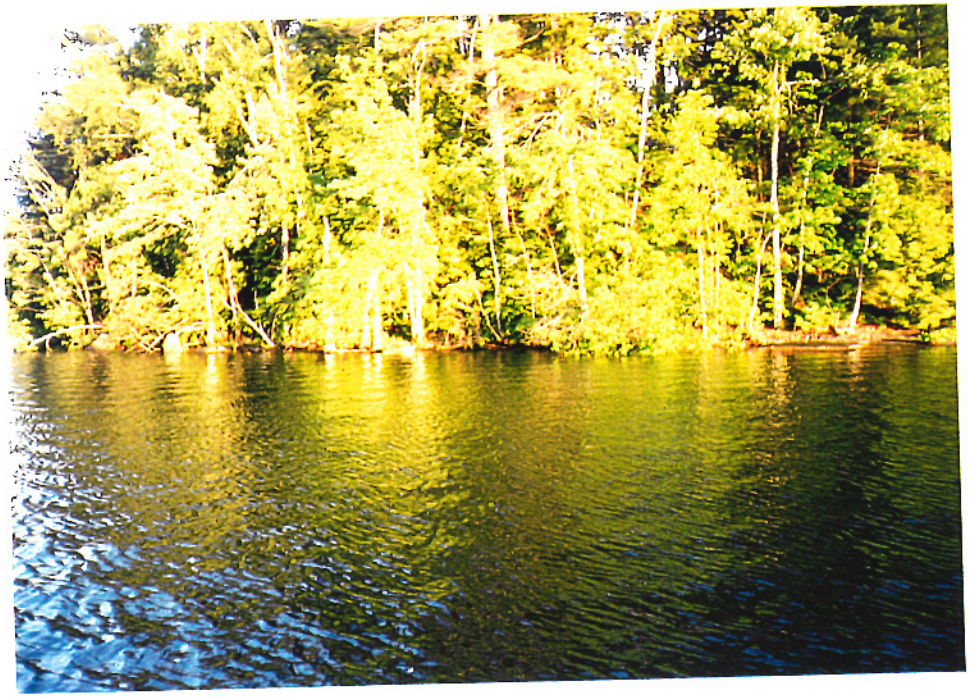
Along this 500 foot section of shore there is variable amounts of natural rock with 20% of section showing signs of soil loss overall Low Priority.

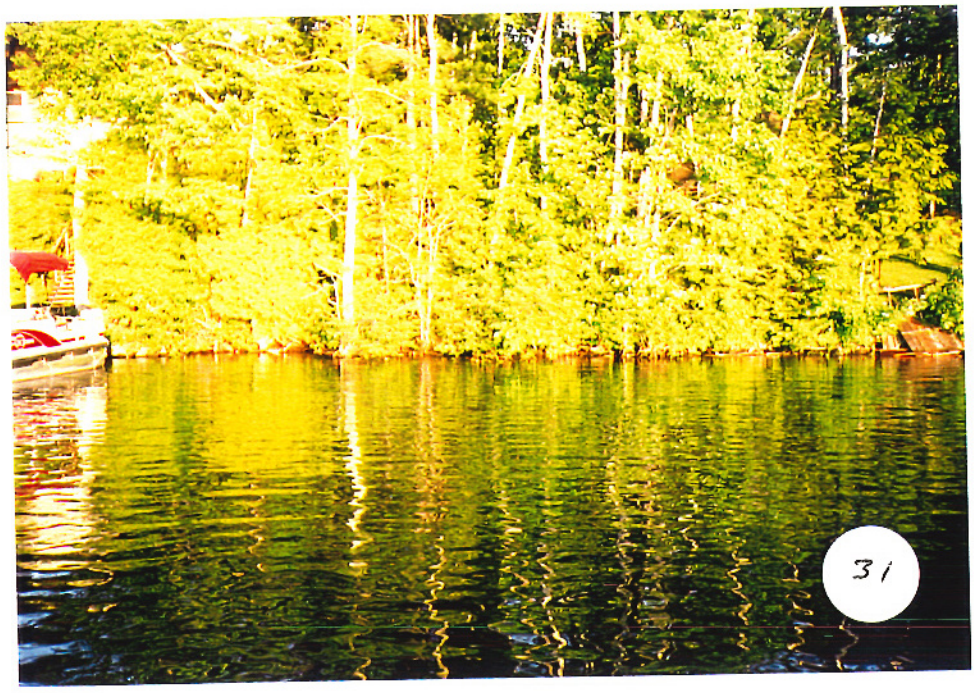
6/18/00 S.W. +5

Eroding bank above high water mark. 6 feet wide 4 feet in height. Low priority

6/18/00 S.W.+5

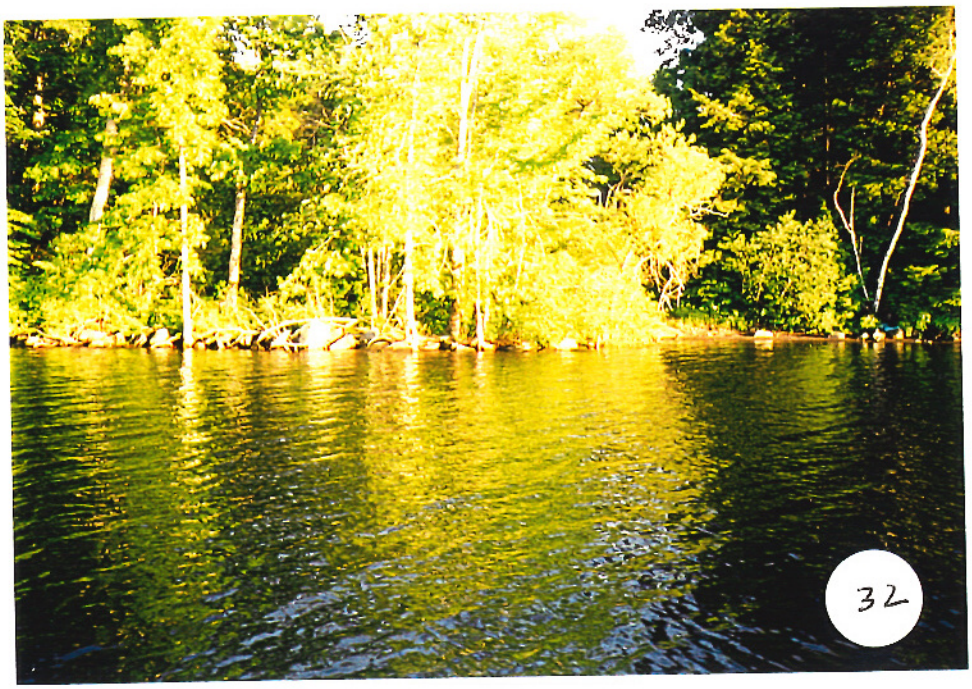
This is the pine tree at the end of Killdeer Point. At current water levels and high wave action the tree is still dry. Moving around the North side of the point (lower photo) there is eroding soil amid scattered amounts of rock. This area is exposed to strong wave action. Along the point there is 300-400 feet of eroding shore but without bank collapse. Difficult access. Medium priority. Killdeer Point Association contacted.





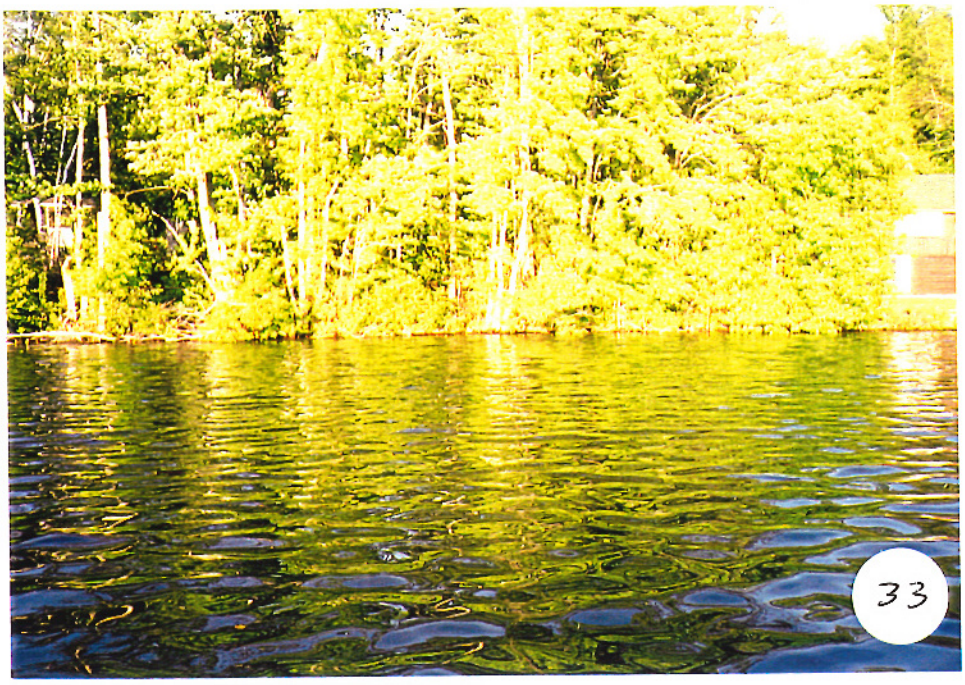
6/18/00 S.W. +5

On the north side of Kildeer Point this wooded section between 2 small sand beaches is exposed to significant wave action from NW winds and is eroding showing exposed roots with bank height of8-12 inches. This section is 75 feet in length. Medium Priority.



6/18/00 S.W. +5

Just south of Robert O'Connors 35 feet of trees in water stable soil Low Priority



6/18/00 S.W. +5

Just north of Kildeer Point 75 feet of trees in water moderate amount of rock appears to be some soil loss Medium Priority.

Site 30 is towards the end of Killdeer Point on the North side, site 31 is close to the start of the point where as 32 and 33 are before the point.

6/12/00 S.W. +5

This is the bottom of FR # 41 at lower end of road, seen at top of photo, water runs down though vegetation but does reach lake. Should be remedied by reditching.The next photo is slightly to the South and is a local boat launch area with some minor upland erosion.

6/12/00 S.W.+5

75 foot section just south of Four Season"s Club beach with trees falling in the water, well vegetated. Medium Priority.

6/12/00 S.W. +5

600 foot section between Friend's Camp and Robert Priest property that has exposed soil and roots at current water levels more rock than that in next photo but still at risk. Priority Medium High but access may be a problem.

6/12/2000 S.W. +5

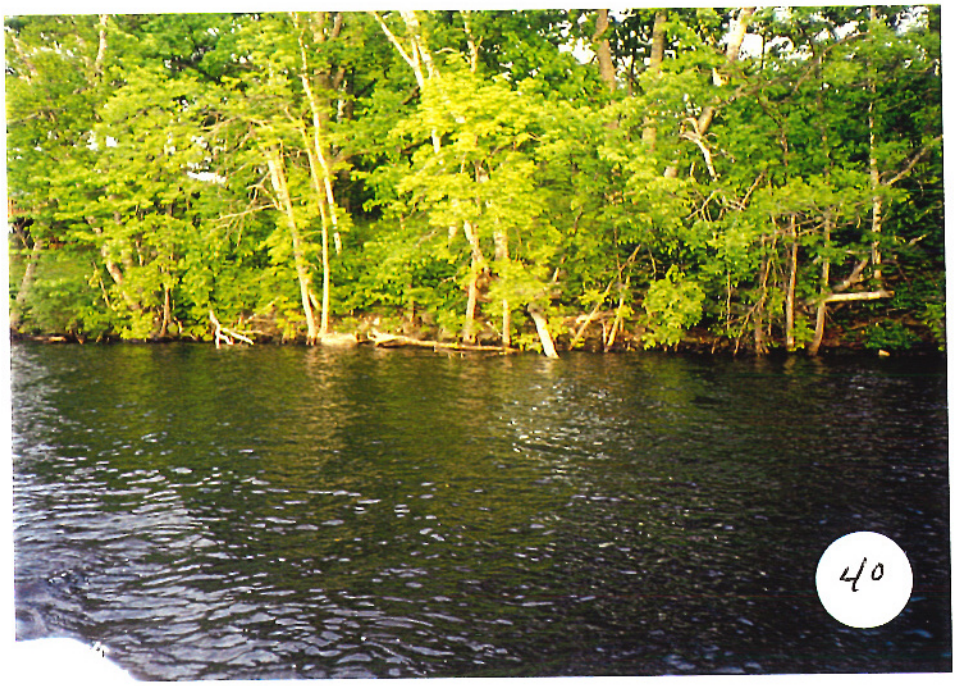
1000 foot section on East Shore opposite John Jones Island. This section shows ongoing erosion with variable amount of rock along the shore. There is much vegetation around the roots that stabilizes the soil but this is still an area at high risk than most others. There is little natural rip rap below the water line. High Priority area by relatively inaccessible. (2 pictures)

6/10/00 S.W. +3

Second property on F.R.#36 collapsing retaining wall 30-50foot of soils 8-10 inches in height. Retaining wall area may be difficult to repair. Name on cottage is Lawler, information left at camp. Medium priority.

6/10/00 S.W.+3

Property on F.R. #36. Storm damaged tree with collapsed bank, 40 feet of eroding bank up two 2 feet in height. Fairly significant soil in lake. High/Medium priority. Information left in door.



6/10/00 S.W. +3

On east shore across from Taconnet Island, 150 feet of previously eroded shore trees in water but with lots of rock around current bank. Does not appear to be actively eroding. Low priority

6/10/00 S.W. +3

Opposite from cable crossing for Taconnet Island 75 feet of exposed shore rooted, vegetated Low Priority

6/10/00 S.W. +3

East shore Sukeforth property on north side of point 125 feet of trees in water at current water levels indicating past erosion. Good rock all around trees and not actively eroding now. Low priority.

6/8/2000 S.W. +3

THIS 25' SECTION OFF OF FIRE RD 22 IS A ROTTING RETAINING WALL WITH A CAMP THAT IS FALLING DOWN. TO RIGHT TREE IS UNDERCUT OVERALL MINIMAL AMOUNT OF SOIL LOSS

NOTICE LEFT AT PROPERTY

LOW PRIORITY

TABLE 1 EROSION CALCULATIONS

SITE NUMBER	LINEAR FEET OF ERODING SOILS	
4	75	
5	50	
6	15	
7	75	
8	50	
9	40	
10	75	area along causeway
11	35	
12	25	
13	40	
14	50	
15	50	
20	50	
21	80	
24	75	
26	30	
28	100	
29	6	
30	400	
31	75	
35	75	
36	600	
37	1000	
38	50	
39	40	

Estimated eroding shore front noted in survey 3161 feet with total shore front in East and North Basin noted to be 82,300 feet.

TABLE 2 PRIORITY LIST SUMMER 2000 - SHORE FRONT

SITE NUMBER	COMMENTS
1	little erosion but community interest
4	this would complete this project
8	N/C
18	large amount of silt from field and road
20	KMD site part of previous project
26	multiple problems

China Lake

SHORE FRONT SURVEY

Buoy Type By Number

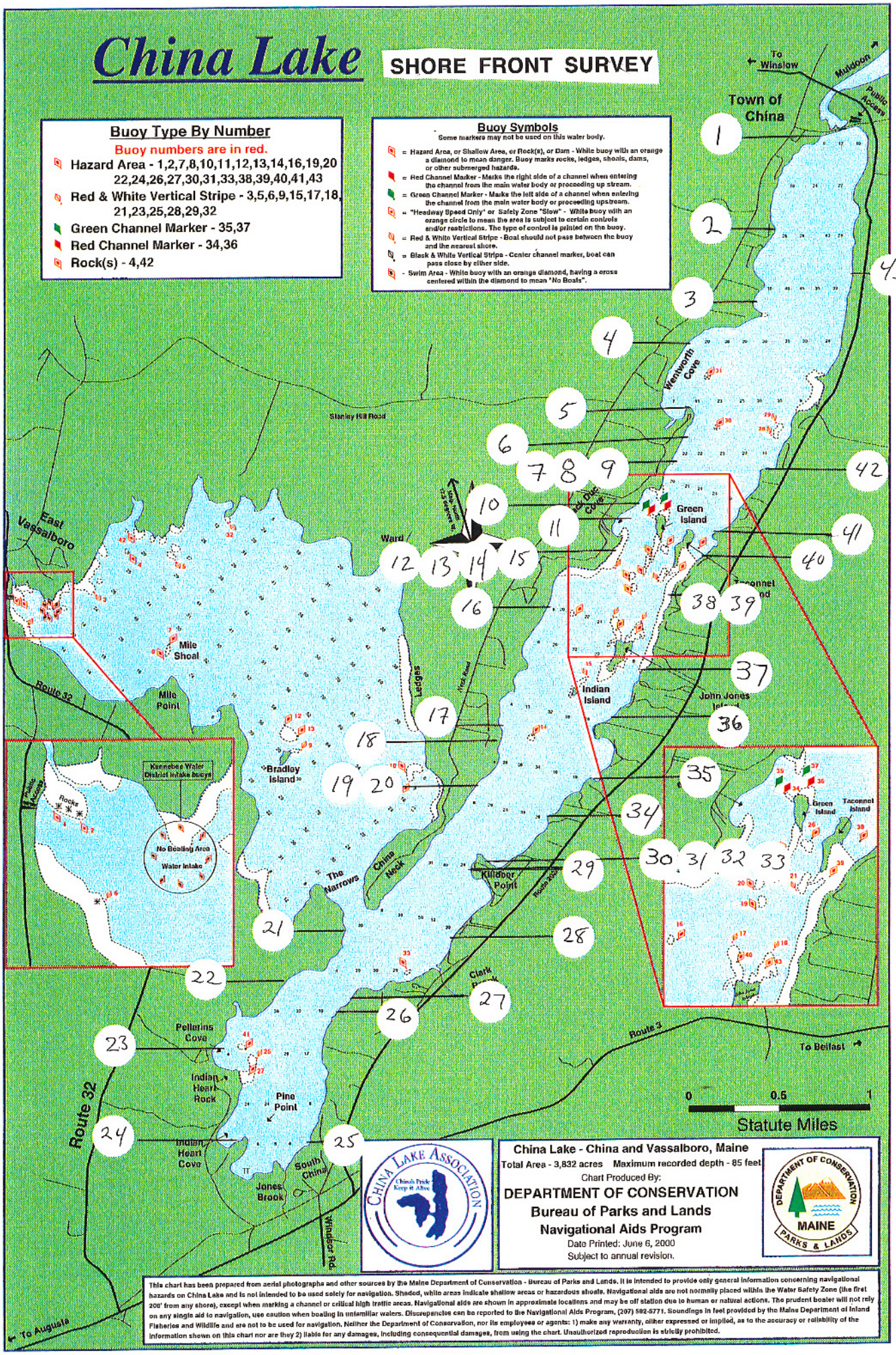
Buoy numbers are in red.

- Hazard Area - 1,2,7,8,10,11,12,13,14,16,19,20 22,24,26,27,30,31,33,38,39,40,41,43
- Red & White Vertical Stripe - 3,5,6,9,15,17,18, 21,23,25,28,29,32
- Green Channel Marker - 35,37
- Red Channel Marker - 34,36
- Rock(s) - 4,42

Buoy Symbols

Some markers may not be used on this water body.

- = Hazard Area, or Shallow Area, or Rock(s), or Dam - White buoy with an orange a diamond to mean danger. Buoy marks rocks, ledges, shoals, dams, or other submerged hazards.
- = Red Channel Marker - Marks the right side of a channel when entering the channel from the main water body or proceeding up stream.
- = Green Channel Marker - Marks the left side of a channel when entering the channel from the main water body or proceeding upstream.
- = "Headway Speed Only" or Safety Zone "Slow" - White buoy with an orange circle to mean the area is subject to certain controls and/or restrictions. The type of control is printed on the buoy.
- = Red & White Vertical Stripe - Boat should not pass between the buoy and the nearest shore.
- = Black & White Vertical Stripe - Center channel marker, boat can pass close by either side.
- - Swim Area - White buoy with an orange diamond, having a cross centered within the diamond to mean "No Boats".



China Lake Association — China's Pride Keep it Alive

China Lake - China and Vassalboro, Maine

Total Area - 3,832 acres Maximum recorded depth - 85 feet

Chart Produced By:

DEPARTMENT OF CONSERVATION

Bureau of Parks and Lands

Navigational Aids Program

Date Printed: June 6, 2000

Subject to annual revision.

DEPARTMENT OF CONSERVATION — MAINE PARKS & LANDS

This chart has been prepared from aerial photographs and other sources by the Maine Department of Conservation - Bureau of Parks and Lands. It is intended to provide only general information concerning navigational hazards on China Lake and is not intended to be used solely for navigation. Shaded, white areas indicate shallow areas or hazardous shoals. Navigational aids are not normally placed within the Water Safety Zone (the first 200' from any shore), except when marking a channel or critical high traffic areas. Navigational aids are shown in approximate locations and may be off station due to human or natural actions. The prudent boater will not rely on any single aid to navigation, use caution when boating in unfamiliar waters. Discrepancies can be reported to the Navigational Aids Program, (207) 582-5771. Soundings in feet provided by the Maine Department of Inland Fisheries and Wildlife and are not to be used for navigation. Neither the Department of Conservation, nor its employees or agents: 1) make any warranty, either expressed or implied, as to the accuracy or reliability of the information shown on this chart nor are they 2) liable for any damages, including consequential damages, from using the chart. Unauthorized reproduction is strictly prohibited.

China Lake Association

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CHINA LAKE STREAM AND CULVERT SURVEY 2000

During the month of April 2000 following times when 2-3 inches of rain was received in a 48 hour period the streams and culverts crossing either Route 202 or the Old China Road were surveyed. This survey assessed the tributaries on the east shore of China Lake from the Head of Lake area down to Jones Brook at the south end of China Lake The turbidity of the water in the streams, the relative volume of water,and the nature of the watershed of the streams were assessed. The drainage area was surveyed and the streams walked to their source when possible. Sixteen tributaries to China Lake were identified in this current phase of the stream and tributary survey. Three of these tributaries (sites C,L,M,) were simply culverts under Route 202 which drain only the highway ditch and perhaps some near lake lawn or field . Nine tributaries (sites B,D,E,F,G,H,I,J,K) were intermittent streams some providing water to the lake most of the time while others flowed only during the wettest times. All consistently flow in the Spring. Four streams flow nearly year round and are noted as sites A,N,O,P. The largest volume contributor to China Lake is the stream from the marsh north of Route 202 referred to as the Muldoon (A). The next largest volume contributor is Clark Brook (O) then Jones Brook (P). There are 3 streams of note emptying into the West Basin of China Lake These streams are not reviewed at this time but they have volume flows that seem to be less than Jones Brook. One stream running under Route 32 into the West Basin was the site of extensive bank erosion control work in the past.

Soils carried by some of these streams or culvert crossings into China Lake are a potential significant source of pollution. During heavy Spring rains sites J and N are so heavily silted that visibility down into the stream is less than six inches. Muldoon Stream, on the other hand, runs clear year round although the water is stained with tannins. Clark Brook also runs very clear even in high runoff periods. Both of the watersheds of these two streams are relatively undisturbed. An important comparison can be made between Tarybelu Stream (N) and Clark Brook(O). While much erosion control work has been done in the Terybelu Drive development the stream draining that property still contains large amounts of silt while the water from the undeveloped Clark Brook watershed runs clear.

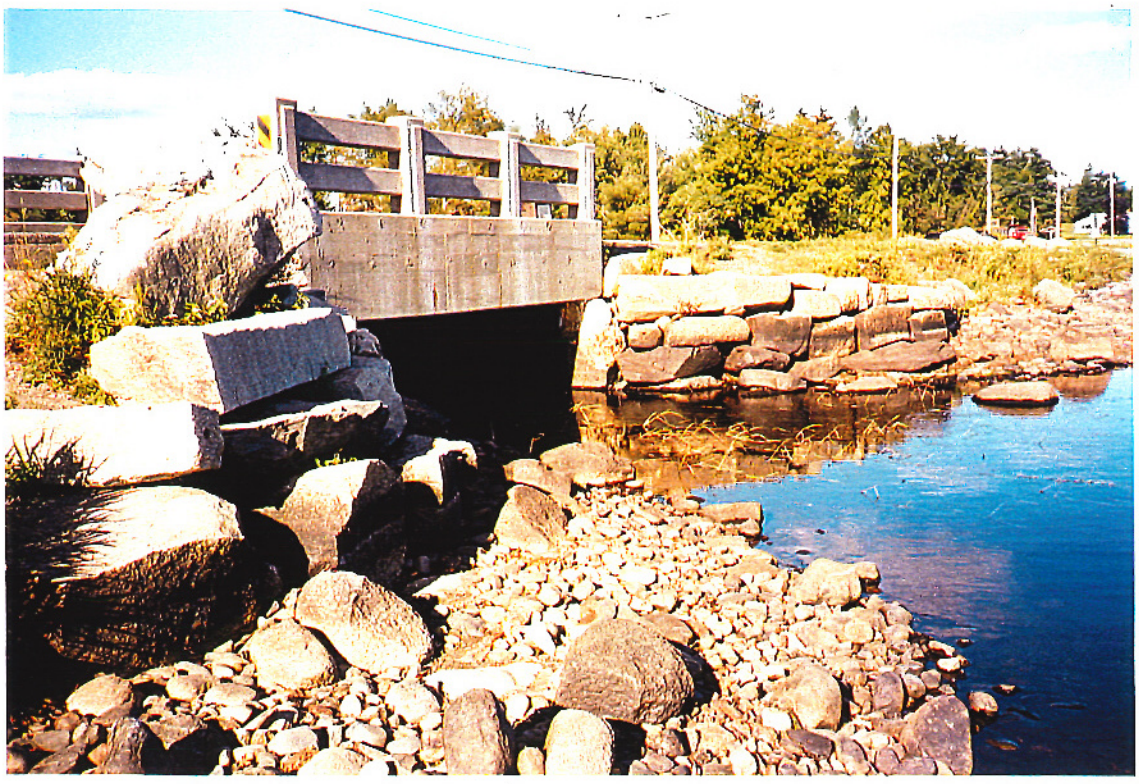
A scale comparing both relative water volumes in the streams or culverts as well as the amount of siltation was constructed. In regards to water flow on a 1-4 scale 1 was low volume and 4 was high volume, usually reserved for year round steams.

Siltation was scored 0-4. With 0 being clear and 4 being heavily silted much like a coffee with milk mixture. The data is summarized in **Table I.** Survey sites are marked on the lake map.

Through this survey work has already begun on the Bickford Stream watershed area which received the highest priority for immediate work with other high priority areas being noted as sites D,J,K,N,P. The erosion on the Bickford property is agricultural related with the typical cause of stream born silt at other sites appearing to be housing and gravel road related. This survey appears to demonstrate that streams draining areas with significant development represent at risk areas (D, N,) even though care was taken in the planning of these developments. Development of the higher ground east of Route 202 may threaten the water quality in China Lake through increased soil runoff if great care is not taken.

Completion of the remainder of the East Basin Stream Survey is planned for the Spring 2001 although far fewer tributaries are found on the west shore of the East Basin than are found on the east side which has now been surveyed. Work will then proceed to the West Basin of China Lake

Muldoon Stream- this year round stream flows from a 50 acre marsh on the north side of Route 202 at the head of China Lake. It crosses under 202 and then then under the causeway near the boat landing. This stream appears to be the highest volume contributor to China Lake. In the Spring ripples and currents from this stream can be seen to extend 500 feet out into the lake. The stream's watershed is relatively undisturbed at the present time and the water runs clear although stained with tannins. During construction of Route 202 locals recount this stream being heavily silt laden for long periods of time. **Site A, 2 Photos.**



HEAD OF LAKE STREAM- Intermittent stream with cloudy water with obvious sand delta in lake . Drainage is from a 20 acre field that is well vegetated with stable soil. Small wet land present on upland side of culvert. Silt fencing or more permanent structure may help. **Priority Medium. Site B 2 Photos**

LAKEVIEW CULVERT NORTH- Little water flow even at high rain levels . Little siltation. Culvert located 100 feet North of Lakeview Lumber entrance. No Photo. **Site C**

LAKEVIEW CULVERT SOUTH- High water flow with high levels of siltation crosses to Keso property. Siltation from indeterminate sites above but not from Lakeview Lumber property. Appears to be soil coming from upper end of Parmenter Drive with large amounts of water running in road side ditches. **High Priority. Site D. 7 Photos.**

Water along Paramenter Drive

Eroding culverts on the upper portion of Parmenter Drive

Runoff from Gagnon Property

Heavily silted water

Stream empties into China Lake

WHISPERWOOD STREAM- Intermittent stream that drains the South side of Parmenter Drive and a section of Route 202. **Medium Priority. Site E 3 Photos.**

Whisperwood Stream empties into lake

CANDLEWOOD NORTH- This intermittent stream runs only during the wettest periods draining a well vegetated area. It runs clear and travels under the north end of the Candlewood property in a culvert emptying through a French drain system that was placed as part of the lake restoration project. **No Work Needed. Site F. 2 Photos.**

CANDLEWOOD SOUTH- Intermittent stream with culvert crossing 100 yards south of Candlewood runs fairly clear. Where the stream empties into the lake there is some minimal bank erosion. **Low Priority. Site G. 1 Photos.**

FIRE ROAD 20- This culvert crossing is 50 yards south of Fire Road 20. It drains an upland wooded area with significant amounts of runoff from a driveway on the upland side of route 202 marked by mail box number 1555. This stream empties into the lake by flowing in a culvert under Mary Halkyard's property. This 48 inch diameter culvert was replaced in 1999 through a cost share project with the China Lake Association. **Drive way is Medium Priority. Site H. 2 Photos**

FIRE ROAD 21-22 - This small intermittent stream drains a wooded area and crosses under a small footbridge before crossing under 202. **Low Priority Site I. 1 Photo.**

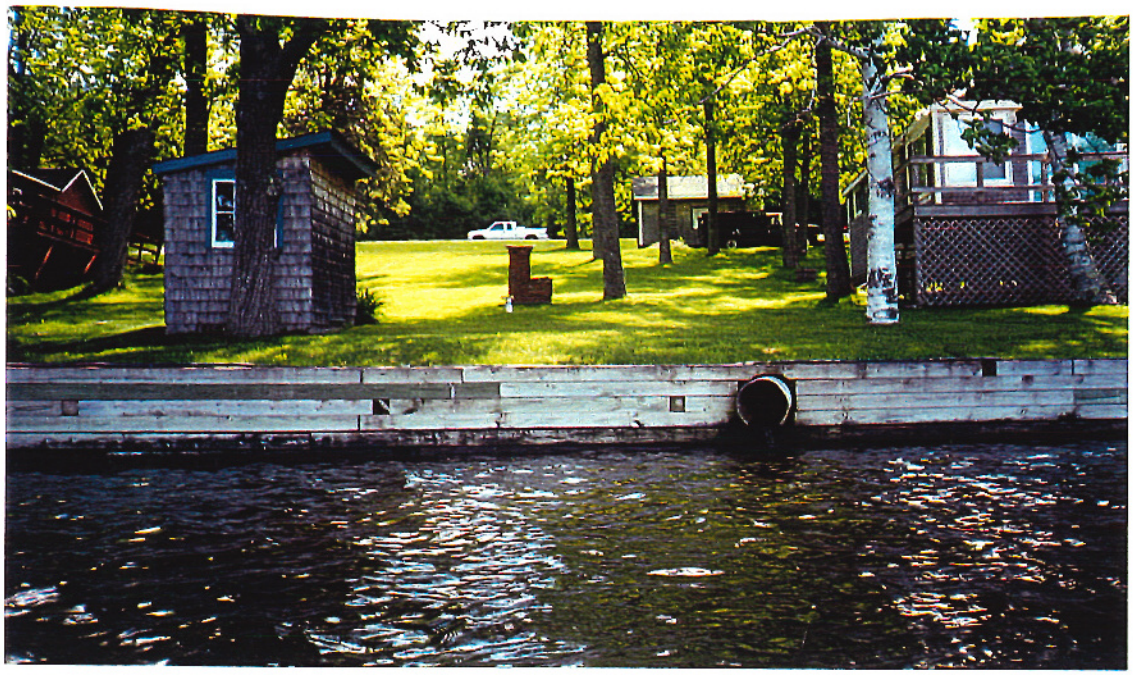
BAILEY PROPERTY · This intermittant stream has very high water volumes during spring runoffs and carries a large amount of silt. The stream drains a 20 acre cornfield, pasture, and gravel road. There are multiple areas in need of work and current efforts are being made to convert the cornfield to hay production and improve the flow of water in the badly eroded ditches. **High Priority. Site J Multiple Photos**

Bare soil in upland field

Erosion created ditches and water running down gravel road- Bailey Property

BICKFORD STREAM- This intermittent stream drains an upland wooded area but also runs down along the side of the gravel access road to Bickford's Garage. Obvious runoff from the road into the stream is occurring. **Road is High Priority. Site K. 1 Photo (poor quality)**

FIRE ROAD 25- Culvert crosses 202 about 100 yards south of Fire Road 25. No real stream provides ditch drainage. **Low Priority. Site L. 1 Photo**



FIRE ROAD 27- Culvert crosses 202 75 yards north of Fire Road 27. Provides ditch drainage only. **Low Priority. Site M. 1 Photo**

Tarybelu Stream- This continious flowing stream crosses Route 202 just north of Fire Rd 28. The stream drains a large upland area of perhaps several square miles extendind up to the narrow guage bed. While the forrested soils are relatively stable the area now developed as Tarybelu Drive contributes much soil to the stream despite 2 siltation ponds, multiple rock lined ditches and turnouts. Poorly maintained culverts and road surfaces are evident. Paving may help this problem. **High Priority. Site N. 5 Photos.**

Siltation Pond

Ditch Turnout

Poorly Maintained Culvert

Looking up Slope of Tarabelu Drive

Large Amounts of Sand Seen in Stream Channel

CLARK BROOK- This continuous flowing stream also is one of the 3 largest inflows to China Lake. The stream is difficult to see since it is way below highway grade just south of Lakeview Hardware where it crosses Route 202 . The stream runs clear even under heavy rain conditions. The drainage area is large and made up of fields and mature woodlands all with less slope than seen in the watersheds of the streams to the north. Numerous beaver dams are found along the course of the stream. **Low Priority. Site O. No Photo.**

JONES BROOK- This continuous flowing stream is the site of much previous bank stabilization work. The stream runs much clearer than it did in past years although the clay banks are prone to erode under the best of circumstances. There is some erosion at the old Route 202 bridge (no photo) and also runoff from the parking area across Route 202 from Brach's Ice Cream. The parking lot is poorly sloped and dumps into Jones Brook during heavy rains. **The parking lot is a High Priority area. Site P. 1 Photo.**

TABLE 1 SUMMARY OF SURVEY SITES- STREAMS 2000

NAME	SITE	FLOW	SILT	COMMENTS
Muldoon Stream	A	4/4	0/4	No problems
Head of Lake	B	2/4	2/4	needs silt fence in field
Lakeview N.	C	1/4	1/4	ditch well vegetated
Lakeview S.	D	2/4	3/4	runoff from Parmenter Dr.
Whisperwood	E	3/4	2/4`	road side runoff
Candlewood N.	F	1/4	0/4	empties in french drain
Candlewood S.	G	2/4	1/4	minimal problems
Fire Rd 20	H	2/4	2/4	previous culvert work at lake
Fire Rd 21	I	2/4	2/4	driveway erosion needs work
Bailey Property	J	3/4	4/4	significant problems
Bickford Stream	K	2/4	2/4	erosion from gravel driveway
Fire Rd 25	L	1/4	1/4	ditch drainage only
Fire Rd. 27	M	1/4	1/4	ditch drainage only
Tarybelu Stream	N	4/4	3/4	development runoff
Clark Brook	O	4/4	0/4	high volume, runs clear
Jones Brook	P	4/4	2/4	parking lot erosion

Underlined sites rated High Priority

China Lake

STREAM SURVEY

Buoy Type By Number

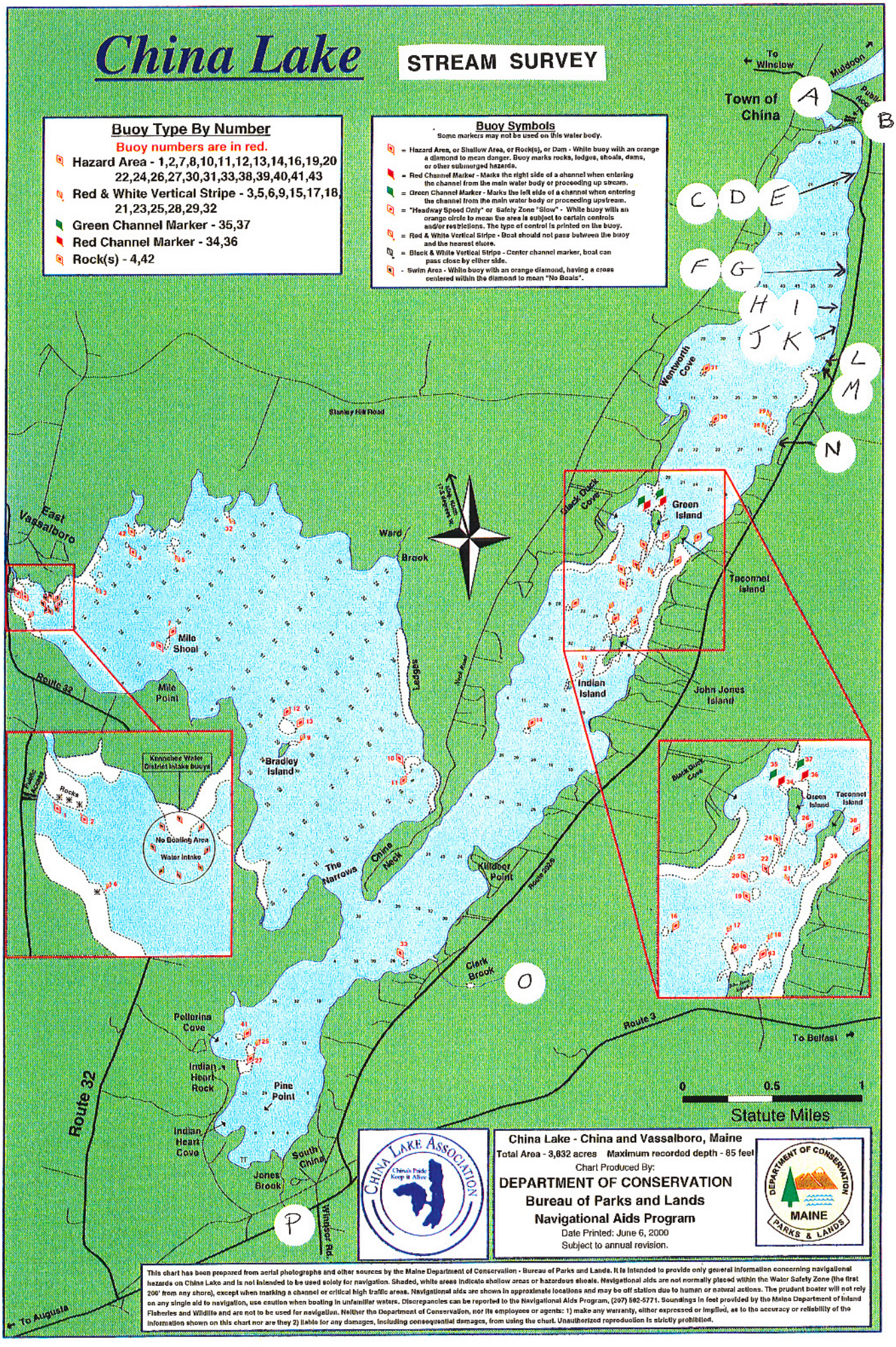
Buoy numbers are in red.

- Hazard Area - 1,2,7,8,10,11,12,13,14,16,19,20 22,24,26,27,30,31,33,38,39,40,41,43
- Red & White Vertical Stripe - 3,5,6,9,15,17,18, 21,23,25,28,29,32
- Green Channel Marker - 35,37
- Red Channel Marker - 34,36
- Rock(s) - 4,42

Buoy Symbols

Some markers may not be used on this water body.

- = Hazard Area, or Shallow Area, or Rock(s), or Dam - White buoy with an orange a diamond to mean danger. Buoy marks rocks, ledges, shoals, dams, or other submerged hazards.
- = Red Channel Marker - Marks the right side of a channel when entering the channel from the main water body or proceeding up stream.
- = Green Channel Marker - Marks the left side of a channel when entering the channel from the main water body or proceeding upstream.
- = "Headway Speed Only" or Safety Zone "Slow" - White buoy with an orange circle to mean the area is subject to certain controls and/or restrictions. The type of control is printed on the buoy.
- = Red & White Vertical Stripe - Boat should not pass between the buoy and the nearest shore.
- = Black & White Vertical Stripe - Center channel marker, boat can pass close by either side.
- - Swim Area - White buoy with an orange diamond, having a cross centered within the diamond to mean "No Boats".



China Lake Association — China's Pride Keep it Alive

China Lake - China and Vassalboro, Maine

Total Area - 3,632 acres Maximum recorded depth - 85 feet

Chart Produced By:

DEPARTMENT OF CONSERVATION

Bureau of Parks and Lands

Navigational Aids Program

Date Printed: June 6, 2000

Subject to annual revision.

Department of Conservation — Maine Parks & Lands

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