

NOTE: If you wish to address the MWD Board of Directors during discussion of an agenda item, or during the PUBLIC FORUM, please complete a Speaker Request card (blue in color) and give it to the Board Secretary. Unless a detailed presentation of an agenda item is required by the Board of Directors, it is requested that each speaker limit comments to FIVE MINUTES. All testimony given before the Board of Directors is tape recorded.

**A G E N D A**  
**BIG BEAR MUNICIPAL WATER DISTRICT**

**BOARD OF DIRECTORS**  
**Regular Meeting**  
**November 17, 2011**

**PLACE:** Big Bear Municipal Water District  
40524 Lakeview Drive, Big Bear Lake, CA 92315

Next Resolution Number: 2011-08

**OPEN SESSION: 1:00 P.M.**

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE**
- 3. DISCUSSION AND ACTION ON CLOSED SESSION ITEMS**
- 4. REPORTS**
  - A. General Manager
  - B. Lake Manager
  - C. Legal
  - D. Committee
  - E. Other
- 5. CONSENT CALENDAR**
  - A. Minutes of a Regular Meeting of November 3, 2011
  - B. Warrant list dated November 14, 2011 for \$81,048.93
- 6. BUSINESS**
  - A. Consider approval of Shorezone Alteration Permit No. S2011-01, Marina Point Development Associates Dredge Project
  - B. Receive report and consider funding for Dam Bay 7 personnel access
- 7. PUBLIC FORUM**

(The Board will receive comments from the public on items not on the agenda; no action is permitted on these items. Time set aside not to exceed 30 minutes total by all participants)
- 8. ANNOUNCEMENTS**

**9. DIRECTOR COMMENTS**

**10. ADJOURNMENT**

**NEXT MEETING:** Open Session at 1:00 P.M.  
Thursday, December 1, 2011  
Big Bear Municipal Water District  
40524 Lakeview Drive, Big Bear Lake, CA

***MINUTES OF A REGULAR MEETING OF  
BIG BEAR MUNICIPAL WATER DISTRICT  
HELD ON THURSDAY, NOVEMBER 3, 2011***

**CALL TO ORDER**

President Suhay called the Open Session to order at 1:00 PM. Those in attendance included Director Murphy, Director Fashempour, Director Eminger, Director Smith, District Counsel Wayne Lemieux (via Skype), Lake Manager Mike Stephenson, and Board Secretary Vicki Sheppard.

**REPORTS**

Lake Manager, Mike Stephenson reported that Flatiron Construction will be done with the construction at the dam bridge road by tomorrow. He stated that they also did some work on Gate 10 explaining that the District furnished the materials and they furnished the labor. He added that the electrical is complete. Mr. Stephenson reported that there is still no way to access the dam. He explained that he submitted a plan last week and expressed the urgency of obtaining access. He reported that Caltrans agreed and Flatiron will get a change order and complete the work. President Suhay asked if DSOD had been notified. Mr. Stephenson explained that they had been notified and agreed that the access did need to be provided. He added that Mike Rogers feels that the plan that he sent to Flatiron was fine. President Suhay commented that before we had access on both sides. Mr. Stephenson reported that they attempted to give us access on both sides but the new electrical will not allow it. He commented that access will be provided (as it was before they put the road on the dam) explaining that "it will serve our purpose". Mr. Stephenson reported on some work that County Flood is doing at Rathbun Creek explaining that they are dumping dirt in the creek just behind CVS. He added that he spoke to Pavlova Vitale of County Flood. He stated that she came out and looked at the work and reported that it was unacceptable explaining that they would fix the problem.

Mr. Stephenson shared a PowerPoint presentation on Milfoil Control Activities in Big Bear Lake that he made at the CALMS Conference he attended in early October (see attached).

**APPROVAL OF CONSENT CALENDAR**

Upon a motion by Director Murphy, seconded by Director Fashempour, the following consent items were unanimously approved:

- Minutes of a Regular Meeting of October 20, 2011
- Warrant list dated October 26, 2011 for \$351,644.31

**PUBLIC FORUM**

No comments were made

**ANNOUNCEMENTS**

Mr. Stephenson reported that on last April 1<sup>st</sup> he predicted that the lake level would be 2' down from full on November 1<sup>st</sup> adding that the level was exactly 2' down from full on that date. He commented that he will be taking some vacation days on Thursday and Friday of next week.

**DIRECTOR COMMENTS**

Director Fashempour complimented Mr. Stephenson on his presentation. Director Eminger agreed.

**ADJOURNMENT**

There being no further business, the meeting was adjourned at 1:56 P.M.

**NEXT MEETING**

Open Session at 1:00 P.M.  
Thursday, November 17, 2011  
Big Bear Municipal Water District  
40524 Lakeview Drive, Big Bear Lake, CA

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Vicki Sheppard  
Secretary to the Board  
Big Bear Municipal Water District

(SEAL)

# Big Bear Lake Milfoil Control Activities

Presented by  
Mike Stephenson  
Lake Manager  
Big Bear Municipal water District

## History

- Harvesting on Big Bear Lake began in late 60's
- Approximately 3,000 tons annually during peak operations 1990-2002
- Aqua Mog operations began in 1980's
- First substantial herbicide treatment was in 2002
- Currently using a combination of both harvesting and herbicide treatments



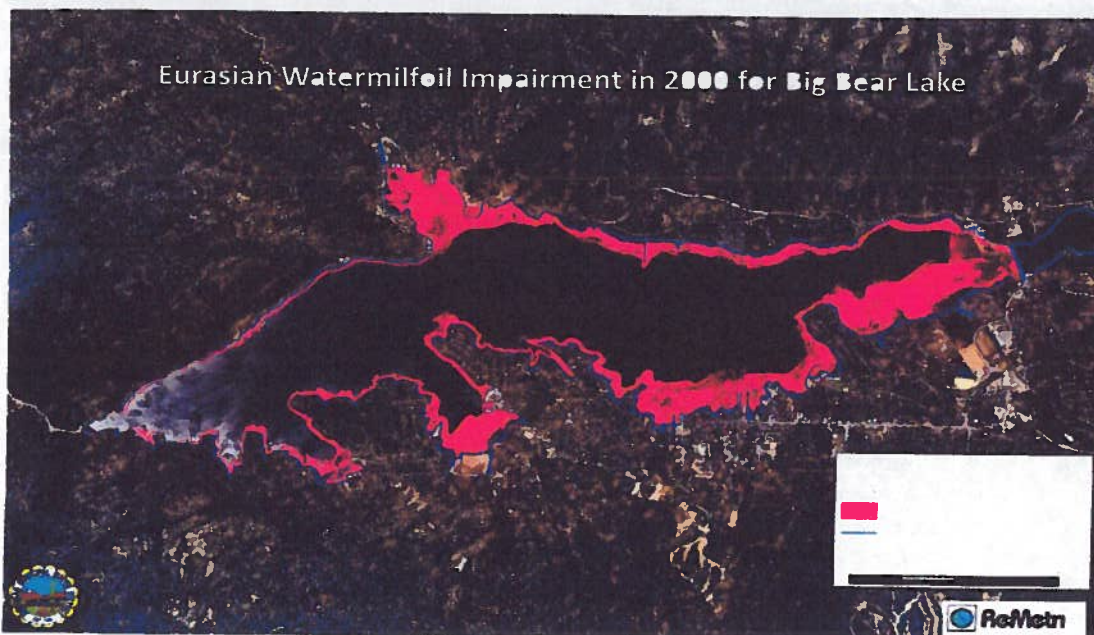
Typical Early Summer Conditions



# Aqua Mog



## 900 Acres Milfoil in 2000



## First Major Herbicide Treatment in 2002

- Five large areas were treated with Fluridone
- Metcalf Bay approximately 30 acres
- Boulder Bay approximately 20 acres
- Mallard Lagoon approximately 5 acres
- East end of the Lake approximately 50 acres
- Grout Bay approximately 35 acres

## Areas Treated in 2002





## Harvesting and Aqua Mog Resumed

- Purchased a transporter as off loading sites became more difficult to access.
- District purchased another harvester
- Lake began to drop due to drought



## Transporter Off Loading



## Big Bear Lake Full Pool



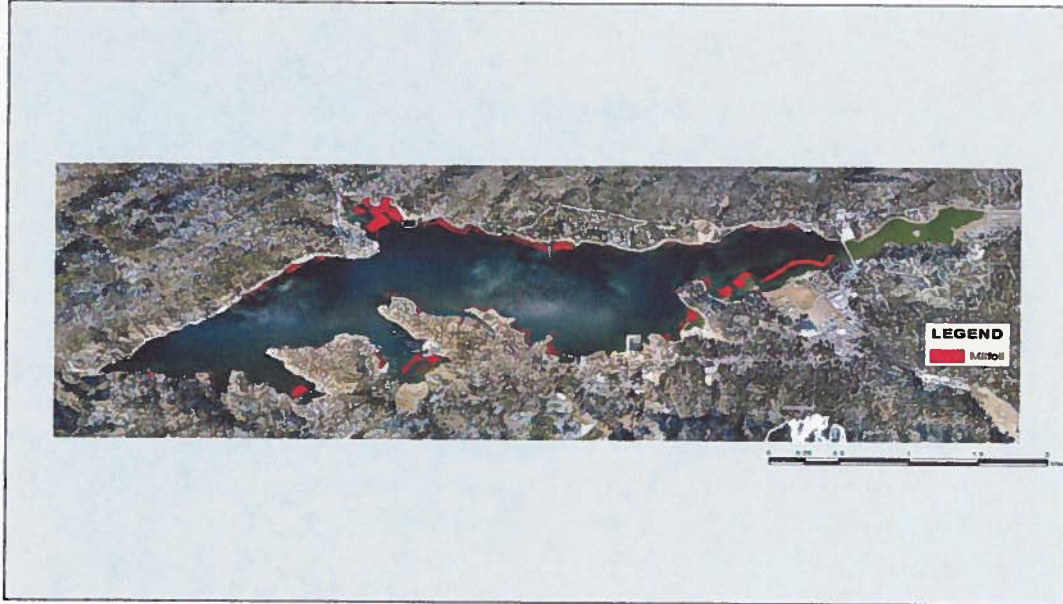
Drawdown 4 Feet



Drawdown 16 Feet



# 2008 Milfoil Locations 450 Acres



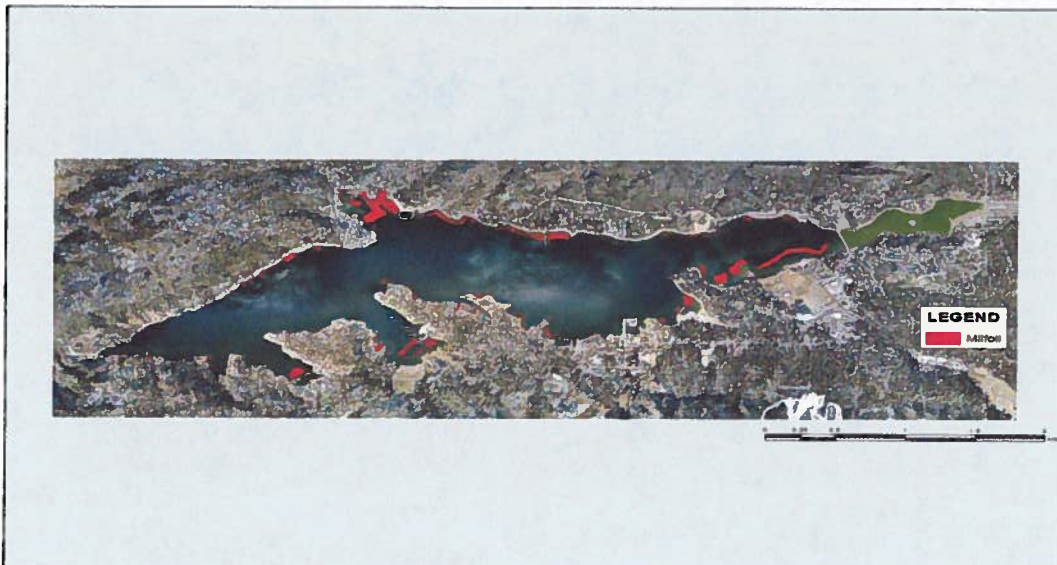
# 2008 Treatment 312 acres

- Triclopyr granular was mostly used





2009 Milfoil Locations  
317 acres



## 2009 Treated 234 Acres

- Triclopyr liquid
- Triclopyr granular
- Diquat

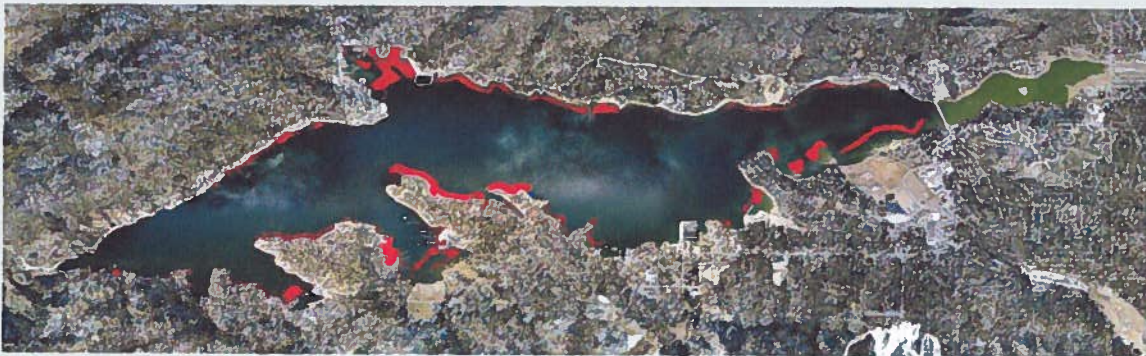
## 2010 Milfoil Locations 177 acres



## 2010 112 acres Treated

- Triclopyr
- 2,4-D
- Diquat

## 2011 Milfoil locations



# 2011 Treated 284 Acres

- Mapped 324 Acres of Milfoil
- Used a combination of Floridone , Triclopyr, Diquat
- Harvested 105 Tons Natives
- Removed 130 Tons Milfoil Fragments

Herbicide 2010

| Date | Zone | Dock % | Lake % | Prep Time in Min. | Total App. Min. | Dock Min. | Lake Min. | Labor Cost |          |          | Cost of Treatment |             |             |            |            |
|------|------|--------|--------|-------------------|-----------------|-----------|-----------|------------|----------|----------|-------------------|-------------|-------------|------------|------------|
|      |      |        |        |                   |                 |           |           | Dock       | Lake     | Prep     | Total lbs         | # lbs. Dock | # lbs. Lake | Dock       | Lake       |
| 7/26 | 48   | 40%    | 60%    | 60                | 190             | 72        | 108       | \$56.44    | \$83.16  | \$46.20  | 100               | 400         | 600         | \$1,396.00 | \$2,094.00 |
| 7/26 | 54   | 40%    | 60%    | 60                | 240             | 96        | 144       | \$73.92    | \$110.88 |          | 120               | 480         | 720         | \$1,675.20 | \$2,512.80 |
| 7/23 | 7*   | 50%    | 50%    | 0                 | 130             | 80        | 80        | \$61.60    | \$61.60  | \$0.00   | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/23 | 8*   | 50%    | 50%    | 0                 | 130             | 80        | 80        | \$61.60    | \$61.60  |          | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/23 | 9*   | 50%    | 50%    | 0                 | 130             | 80        | 80        | \$61.60    | \$61.60  |          | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/22 | 10*  | 50%    | 50%    | 0                 | 120             | 60        | 60        | \$46.20    | \$46.20  | \$0.00   | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/22 | 11*  | 50%    | 50%    | 0                 | 120             | 60        | 60        | \$46.20    | \$46.20  |          | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/22 | 12*  | 50%    | 50%    | 0                 | 120             | 60        | 60        | \$46.20    | \$46.20  |          | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/22 | 13*  | 50%    | 50%    | 0                 | 120             | 60        | 60        | \$46.20    | \$46.20  |          | 340               | 170         | 170         | \$593.30   | \$593.30   |
| 7/21 | 14*  | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  | \$0.00   | 600               | 300         | 300         | \$1,047.00 | \$1,047.00 |
| 7/21 | 15   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 600               | 300         | 300         | \$1,047.00 | \$1,047.00 |
| 7/21 | 16   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 600               | 300         | 300         | \$1,047.00 | \$1,047.00 |
| 7/21 | 17   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 600               | 300         | 300         | \$1,047.00 | \$1,047.00 |
| 7/21 | 18   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 600               | 300         | 300         | \$1,047.00 | \$1,047.00 |
| 7/21 | 20   | 70%    | 30%    | 0                 | 80              | 56        | 24        | \$43.12    | \$18.48  |          | 300               | 210         | 90          | \$732.90   | \$314.10   |
| 7/20 | 22   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  | \$0.00   | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/20 | 23   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/20 | 25   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/20 | 26   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/20 | 27   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/20 | 28   | 50%    | 50%    | 0                 | 80              | 40        | 40        | \$30.80    | \$30.80  |          | 520               | 260         | 260         | \$907.40   | \$907.40   |
| 7/16 | 48   | 30%    | 70%    | 245               | 30              | 9         | 21        | \$6.93     | \$15.17  | \$188.85 | 800               | 240         | 560         | \$837.60   | \$1,954.40 |
| 7/16 | 49   | 0%     | 100%   | 245               | 30              | 0         | 30        | \$0.00     | \$23.10  |          | 840               | 0           | 840         | \$0.00     | \$2,501.80 |
| 7/16 | 54   | 0%     | 90%    | 245               | 70              | 7         | 63        | \$5.30     | \$48.51  |          | 560               | 58          | 504         | \$195.44   | \$1,758.98 |
| 7/16 | 55   | 70%    | 30%    | 245               | 80              | 56        | 24        | \$43.12    | \$18.48  |          | 600               | 420         | 180         | \$1,465.80 | \$628.20   |
| 7/16 | 56   | 0%     | 100%   | 245               | 10              | 0         | 10        | \$0.00     | \$7.70   |          | 100               | 0           | 100         | \$0.00     | \$349.00   |
| 7/16 | 57   | 0%     | 100%   | 245               | 15              | 0         | 15        | \$0.00     | \$11.55  |          | 100               | 0           | 100         | \$0.00     | \$349.00   |

### TOTALS FOR SEASON

| Dock % | Lake % | Prep Time  | App Time | Dock Time | Lake Time | Labor Dock Cost  | Labor Lake Cost | Labor Prep Cost | lbs    | # lbs. Dock | # lbs. Lake          | Dock Treatment Cost | Lake Treatment Cost |
|--------|--------|------------|----------|-----------|-----------|------------------|-----------------|-----------------|--------|-------------|----------------------|---------------------|---------------------|
| 46.83% | 53.47% | 3875       | 4765     | 2,125     | 2,640     | \$1,636          | \$2,033         | \$2,984         | 28,640 | 12,822      | 15,458               | \$4,251.60          | \$57,438.42         |
|        |        | TOTAL MIN. |          |           |           | Total Labor Cost |                 |                 |        |             | Total Treatment Cost |                     |                     |
|        |        | 8640       |          |           |           | \$6,653.00       |                 |                 |        |             | \$99,953.60          |                     |                     |

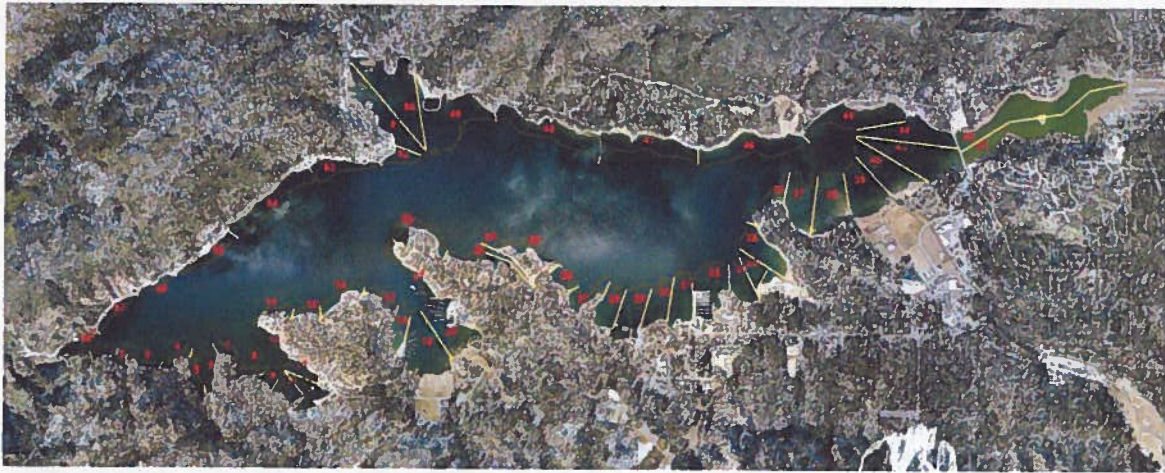
| Fuel Cost Per Day | Days | TOTAL    |
|-------------------|------|----------|
| \$24.50           | 18   | \$441.00 |

**GRAND TOTAL \$107,047.60**

Please note: All application were MAX-G with the exception of those noted with an asterisk, which were treated with OTF



# Weed Treatment Zones



## Current Harvesting Operations

- Navigation channels for access to docks
- Topped out natives for aesthetic reasons
- Cleaning up milfoil fragments after herbicide treatments
- Strategic harvesting for improving treatment efficacy
- Harvesting for fish habitat

# 2010

## Weed Harvesting / Nutrient Removal

| Date   | # Loads | Total Wet Weight LB's | Total Dry Weight LB's | Phosphorous Content Removed In | Nitrogen Content Removed In | Emp. Unload Min. | Emp. Harvest Min. | Emp. Prep Cost | Employee Harvesting Cost | Date   | # Loads | Total Wet Weight LB's | Total Dry Weight LB's | Phosphorous Content Removed In | Nitrogen Content Removed In | Emp. Unload Min. | Emp. Harvest Min. | Emp. Prep Cost | Employee Harvesting Cost |
|--------|---------|-----------------------|-----------------------|--------------------------------|-----------------------------|------------------|-------------------|----------------|--------------------------|--------|---------|-----------------------|-----------------------|--------------------------------|-----------------------------|------------------|-------------------|----------------|--------------------------|
| Jul-06 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Aug-17 | 3       | 21300                 | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 |
| Jul-07 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-18 | 3       | 21300                 | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 |
| Jul-09 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-19 | 3       | 21300                 | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 |
| Jul-12 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-20 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |
| Jul-15 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Aug-23 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |
| Jul-19 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-24 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Jul-27 | 3       | 21,300                | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 | Aug-25 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |
| Jul-28 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-26 | 3       | 21300                 | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 |
| Jul-29 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Aug-27 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Jul-30 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Aug-30 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-02 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Aug-31 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-03 | 3       | 21,300                | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 | Sep-01 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-04 | 3       | 21,300                | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 | Sep-02 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-05 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Sep-03 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-06 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Sep-07 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-09 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Sep-08 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-10 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Sep-09 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-11 | 3       | 21,300                | 2,065.7               | 6.3045                         | 53.3956                     | 90               | 390               | \$69.30        | \$300.30                 | Sep-10 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |
| Aug-12 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 | Sep-11 | 2       | 14,200                | 1404.38               | 4.2030                         | 35.5971                     | 60               | 420               | \$46.20        | \$323.40                 |
| Aug-13 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Sep-14 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |
| Aug-15 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 | Sep-15 | 1       | 7,700                 | 702.9                 | 2.015                          | 07,7985                     | 30               | 450               | \$23.0         | \$348.50                 |

### TOTALS

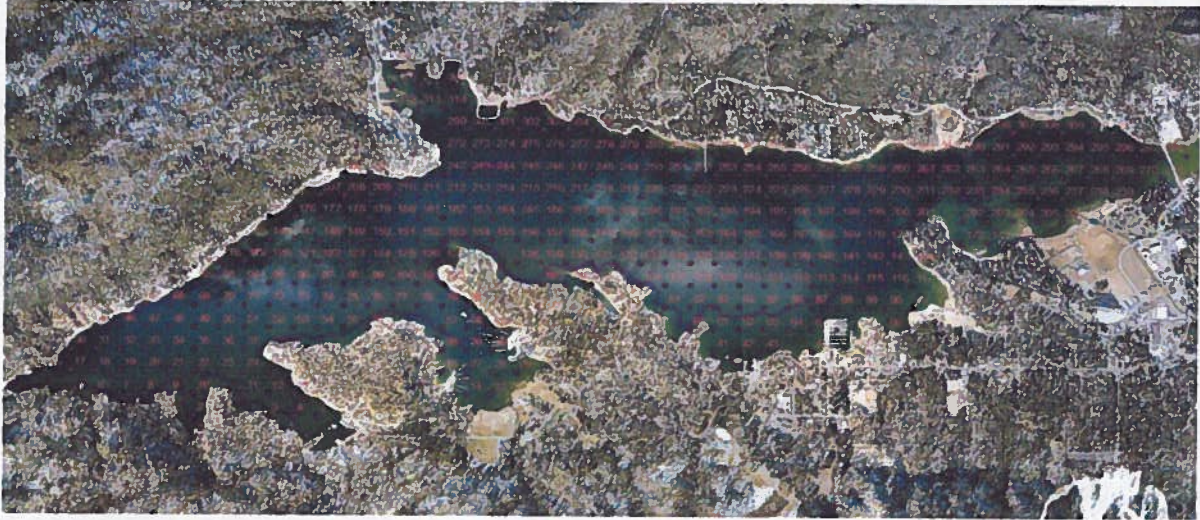
| # Loads | Wet Weight         | Dry Weight | Phosphorous       | Nitrogen    | Unload Min      | Harvest Min        | Prep Cost           | Harvest Cost |
|---------|--------------------|------------|-------------------|-------------|-----------------|--------------------|---------------------|--------------|
| 79      | 560,900            | 55,473.01  | 166.02            | 1,406.08    | 2,370           | 17,790             | \$1,824.90          | \$13,698.30  |
|         | Wet Weight in Tons |            | Fuel Cost Per Day | No. of Days | TOTAL Fuel Cost | TOTAL Employee Min | TOTAL Employee Cost |              |
|         | 280                |            | \$24.50           | 42          | \$1,029.00      | 20,160             | \$15,523.20         |              |



# Eductor System



# Survey Points



# Current Plant Beds



# Current Plants Without Milfoil



## Aquatic weeds present

- Eurasian Water milfoil (*Myriophyllum Spicatum*)
- Curley Leaf Pondweed (*Potamogeton Crispus*)
- CoonTail (*Ceratophyllum Demersum*)
- Widgeon grass (*Ruppia Maritima*)
- Smartweed (*Polygonum Amphibium*)
- Elodea (*Elodea canadensis*)



**Big Bear Municipal Water District  
 Computer & Manual Check Register  
 Current and History Files, After 11/01/11  
 Account 10010-00-001, Sessions 000000 to 002478**

| Check                    | Payment / Vendor Information               | Ck Date      | Prty | Invoice    | Session | Reference  | Amount  |
|--------------------------|--------------------------------------------|--------------|------|------------|---------|------------|---------|
| <b>Checking Account:</b> |                                            | 10010-00-001 |      |            |         |            |         |
| 149831                   | ACWA2 / Association of California          | 11/10/11     | 2    | DUES 2012  | 002475  | DUES       | 6571.94 |
| <b>ACWA2 Subtotal :</b>  |                                            |              |      |            |         |            | 6571.94 |
| 149832                   | ALLPR / ALL PRO OUTDOOR POWER EQUIP        | 11/10/11     | 2    | 1207       | 002475  | MAINTTROUT | 74.00   |
| 149832                   |                                            | 11/10/11     | 2    | 1216       | 002475  |            | 17.19   |
| 149832                   |                                            | 11/10/11     | 2    | 1224       | 002475  |            | 40.00   |
| <b>ALLPR Subtotal :</b>  |                                            |              |      |            |         |            | 131.19  |
| 149833                   | BBDSPL / Big Bear Disposal                 | 11/10/11     | 2    | 266348     | 002475  |            | 164.42  |
| <b>BBDSPL Subtotal :</b> |                                            |              |      |            |         |            | 164.42  |
| 149834                   | BBL / City of Big Bear Lake                | 11/10/11     | 2    | 2429       | 002475  |            | 4481.73 |
| <b>BBL Subtotal :</b>    |                                            |              |      |            |         |            | 4481.73 |
| 149835                   | BMARIN / Big Bear Marina                   | 11/10/11     | 2    | 1011766    | 002475  | PETROLEUM  | 86.66   |
| 149835                   |                                            | 11/10/11     | 2    | 10311157   | 002475  | PETROLEUM  | 136.92  |
| <b>BMARIN Subtotal :</b> |                                            |              |      |            |         |            | 223.58  |
| 149836                   | BUTCHR / Butcher's Block & Building Materi | 11/10/11     | 2    | 96377      | 002475  |            | 7.31    |
| 149836                   |                                            | 11/10/11     | 2    | 97191      | 002475  |            | 15.00   |
| 149836                   |                                            | 11/10/11     | 2    | 98517      | 002475  | FACILTMAIN | 1463.94 |
| 149836                   |                                            | 11/10/11     | 2    | 99334      | 002475  | CREDIT     | -90.00  |
| <b>BUTCHR Subtotal :</b> |                                            |              |      |            |         |            | 1396.25 |
| 149837                   | BVCOMM / Bear Valley Community IP          | 11/10/11     | 2    | 10312011   | 002475  | SENECAL    | 296.00  |
| <b>BVCOMM Subtotal :</b> |                                            |              |      |            |         |            | 296.00  |
| 149838                   | BVELEC / Bear Valley Electric              | 11/10/11     | 2    | 11102011   | 002475  | UTILITY    | 152.67  |
| 149838                   |                                            | 11/10/11     | 2    | 11102011 A | 002475  | UTILITY    | 342.33  |
| 149838                   |                                            | 11/10/11     | 2    | 11102011 B | 002475  |            | 8.09    |
| 149838                   |                                            | 11/10/11     | 2    | 11102011 C | 002475  |            | 8.36    |
| 149838                   |                                            | 11/10/11     | 2    | 11102011 D | 002475  |            | 54.77   |
| <b>BVELEC Subtotal :</b> |                                            |              |      |            |         |            | 566.22  |
| 149839                   | CCONNE / CONNELLY PUMPING SERVICES         | 11/10/11     | 2    | 11352      | 002475  |            | 75.00   |
| <b>CCONNE Subtotal :</b> |                                            |              |      |            |         |            | 75.00   |
| 149840                   | CNTYSV / Water & Sanitation                | 11/10/11     | 2    | 10312011   | 002475  |            | 108.38  |
| 149840                   |                                            | 11/10/11     | 2    | 10312011 A | 002475  |            | 108.38  |
| <b>CNTYSV Subtotal :</b> |                                            |              |      |            |         |            | 216.76  |
| 149841                   | COLONI / COLONIAL LIFE                     | 11/10/11     | 2    | 1013587    | 002475  |            | 404.54  |

**Big Bear Municipal Water District  
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|--------|-------------------------------------------|----------|------|------------|---------|--------------------------|-----------------|
|        |                                           |          |      |            |         | <b>COLONI Subtotal :</b> | <b>404.54</b>   |
| 149842 | COMSER / ComSerCo                         | 11/10/11 | 2    | 502494     | 002475  |                          | 255.00          |
|        |                                           |          |      |            |         | <b>COMSER Subtotal :</b> | <b>255.00</b>   |
| 149843 | DIRCTV / DIRECTV                          | 11/10/11 | 2    | 1630075196 | 002475  | UTILITY                  | 157.49          |
|        |                                           |          |      |            |         | <b>DIRCTV Subtotal :</b> | <b>157.49</b>   |
| 149844 | DWP / Department of Water and Power       | 11/10/11 | 2    | 10272011   | 002475  |                          | 80.22           |
| 149844 |                                           | 11/10/11 | 2    | 10272011 A | 002475  |                          | 178.50          |
| 149844 |                                           | 11/10/11 | 2    | 10272011 B | 002475  |                          | 14.60           |
| 149844 |                                           | 11/10/11 | 2    | 10272011 C | 002475  |                          | 173.06          |
| 149844 |                                           | 11/10/11 | 2    | 10272011 D | 002475  |                          | 19.47           |
| 149844 |                                           | 11/10/11 | 2    | 10272011 E | 002475  |                          | 48.12           |
|        |                                           |          |      |            |         | <b>DWP Subtotal :</b>    | <b>513.97</b>   |
| 149845 | EADIEP / Eadie & Payne                    | 11/10/11 | 2    | 117947     | 002475  |                          | 5190.00         |
|        |                                           |          |      |            |         | <b>EADIEP Subtotal :</b> | <b>5190.00</b>  |
| 149846 | ENTERP / Enterprise Rent-A-Car            | 11/10/11 | 2    | 9003023140 | 002475  | TRAVEL                   | 122.08          |
| 149846 |                                           | 11/10/11 | 2    | 926831-32H | 002475  |                          | 107.69          |
|        |                                           |          |      |            |         | <b>ENTERP Subtotal :</b> | <b>229.77</b>   |
| 149847 | GEI / GEI Consultants, Inc                | 11/10/11 | 2    | 504176 E   | 002475  |                          | 2605.00         |
|        |                                           |          |      |            |         | <b>GEI Subtotal :</b>    | <b>2605.00</b>  |
| 149848 |                                           | 11/10/11 | 2    | 504176     | 002475  | WTRTESTING               | 2640.90         |
| 149848 |                                           | 11/10/11 | 2    | 504176 B   | 002475  |                          | 2605.00         |
| 149848 |                                           | 11/10/11 | 2    | 504176 C   | 002475  |                          | 2605.00         |
| 149848 |                                           | 11/10/11 | 2    | 504176 D   | 002475  |                          | 2605.00         |
|        |                                           |          |      |            |         | <b>GEI Subtotal :</b>    | <b>10455.90</b> |
| 149849 | HEALTH / HEALTH BENEFITS AUTHORITY        | 11/10/11 | 2    | 122011     | 002475  |                          | 20172.69        |
|        |                                           |          |      |            |         | <b>HEALTH Subtotal :</b> | <b>20172.69</b> |
| 149850 | IDEARC / SUPERMEDIA LLC                   | 11/10/11 | 2    | 10192011   | 002475  |                          | 59.90           |
| 149850 |                                           | 11/10/11 | 2    | 11012011   | 002475  |                          | 65.50           |
|        |                                           |          |      |            |         | <b>IDEARC Subtotal :</b> | <b>125.40</b>   |
| 149851 | LAFCO / Local Agency Formation Commission | 11/10/11 | 2    | 10122011   | 002475  | PROF SERV                | 217.50          |
|        |                                           |          |      |            |         | <b>LAFCO Subtotal :</b>  | <b>217.50</b>   |
| 149852 | LEMIEU / LEMIEUX & O'NEILL                | 11/10/11 | 2    | 20M 102011 | 002475  |                          | 220.00          |
|        |                                           |          |      |            |         | <b>LEMIEU Subtotal :</b> | <b>220.00</b>   |



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| 149853 |                                          | 11/10/11 | 2    | 147        | 002475  | RETAINER                 | 3500.00        |
|        |                                          |          |      |            |         | <b>LEMIEU Subtotal :</b> | <b>3500.00</b> |
| 149854 | LUDECK / Ludecke's Electric Service      | 11/10/11 | 2    | 6449       | 002475  |                          | 125.00         |
|        |                                          |          |      |            |         | <b>LUDECK Subtotal :</b> | <b>125.00</b>  |
| 149855 | MASTER / FIRST BANKCARD CENTER           | 11/10/11 | 2    | 11092011 A | 002475  |                          | 3930.76        |
|        |                                          |          |      |            |         | <b>MASTER Subtotal :</b> | <b>3930.76</b> |
| 149856 |                                          | 11/10/11 | 2    | 11092011   | 002475  |                          | 1406.03        |
|        |                                          |          |      |            |         | <b>MASTER Subtotal :</b> | <b>1406.03</b> |
| 149857 | MILEHI / Mile High Equipment             | 11/10/11 | 2    | 19995      | 002475  |                          | 4485.00        |
|        |                                          |          |      |            |         | <b>MILEHI Subtotal :</b> | <b>4485.00</b> |
| 149858 |                                          | 11/10/11 | 2    | 19996      | 002475  |                          | 499.06         |
|        |                                          |          |      |            |         | <b>MILEHI Subtotal :</b> | <b>499.06</b>  |
| 149859 | MWH / MWH America, Inc.                  | 11/10/11 | 2    | 1426910    | 002475  | DAMREPAIR                | 4952.56        |
|        |                                          |          |      |            |         | <b>MWH Subtotal :</b>    | <b>4952.56</b> |
| 149860 | NAPA / McConnell Motor Parts Inc.        | 11/10/11 | 2    | 54190      | 002475  |                          | 61.04          |
| 149860 |                                          | 11/10/11 | 2    | 54278      | 002475  | VEHCLMAINT               | 36.18          |
|        |                                          |          |      |            |         | <b>NAPA Subtotal :</b>   | <b>97.22</b>   |
| 149861 | NOCONT / NO CONTRACT VOIP                | 11/10/11 | 2    | 0002646    | 002475  | PHON COMM                | 282.62         |
|        |                                          |          |      |            |         | <b>NOCONT Subtotal :</b> | <b>282.62</b>  |
| 149862 | PERS / Public Employees' Retirement Syst | 11/10/11 | 2    | 1120113    | 002475  |                          | 5107.09        |
|        |                                          |          |      |            |         | <b>PERS Subtotal :</b>   | <b>5107.09</b> |
| 149863 | QUILL / Quill Corporation                | 11/10/11 | 2    | 26802      | 002475  | OFFSUPPLY                | 32.96          |
| 149863 |                                          | 11/10/11 | 2    | 27900      | 002475  |                          | 32.23          |
|        |                                          |          |      |            |         | <b>QUILL Subtotal :</b>  | <b>65.19</b>   |
| 149864 | ROTARY / Rotary Club of Big Bear Lake    | 11/10/11 | 2    | 10312011   | 002475  |                          | 111.00         |
|        |                                          |          |      |            |         | <b>ROTARY Subtotal :</b> | <b>111.00</b>  |
| 149865 | SPEARS / DEAN SPEARS                     | 11/10/11 | 2    | 10172011   | 002475  | RVPKCANCL                | 40.00          |
|        |                                          |          |      |            |         | <b>SPEARS Subtotal :</b> | <b>40.00</b>   |
| 149866 | TERMIN / TERMINIX INTERNATIONAL          | 11/10/11 | 2    | 10142011   | 002475  |                          | 41.00          |
|        |                                          |          |      |            |         | <b>TERMIN Subtotal :</b> | <b>41.00</b>   |

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|----------------------------------------------|-------------------------------------|----------------|--------------|----------------|----------------|--------------------------|-----------------|
| 149867                                       | TIFCO / Tifco Industries            | 11/10/11       | 2            | 70723725       | 002475         |                          | 247.51          |
|                                              |                                     |                |              |                |                | <b>TIFCO Subtotal :</b>  | <b>247.51</b>   |
| 149868                                       | TUTTLE / JOHN TUTTLE                | 11/10/11       | 2            | 10112011       | 002475         |                          | 50.00           |
|                                              |                                     |                |              |                |                | <b>TUTTLE Subtotal :</b> | <b>50.00</b>    |
| 149869                                       | UPS / UPS                           | 11/10/11       | 2            | 441            | 002475         |                          | 562.35          |
|                                              |                                     |                |              |                |                | <b>UPS Subtotal :</b>    | <b>562.35</b>   |
| 149870                                       | VERIZO / Verizon California         | 11/10/11       | 2            | 10252011 A     | 002475         |                          | 40.43           |
| 149870                                       |                                     | 11/10/11       | 2            | 10282011       | 002475         | PHON COMM                | 37.91           |
|                                              |                                     |                |              |                |                | <b>VERIZO Subtotal :</b> | <b>78.34</b>    |
| 149871                                       | WILLIA / Adam Williams              | 11/10/11       | 2            | 10/11 2011     | 002475         |                          | 100.00          |
|                                              |                                     |                |              |                |                | <b>WILLIA Subtotal :</b> | <b>100.00</b>   |
| 149872                                       | XEROX / Xerox Corporation           | 11/10/11       | 2            | 058218608      | 002475         |                          | 520.99          |
|                                              |                                     |                |              |                |                | <b>XEROX Subtotal :</b>  | <b>520.99</b>   |
| 149873                                       | WILLIA / Adam Williams              | 11/10/11       | 2            | 11102011       | 002478         | TRAVELEXPN               | 176.86          |
|                                              |                                     |                |              |                |                | <b>WILLIA Subtotal :</b> | <b>176.86</b>   |
| <b>Total For Check Account: 10010-00-001</b> |                                     |                |              |                |                |                          | <b>81048.93</b> |
| <b>Check Register Total :</b>                |                                     |                |              |                |                |                          | <b>81048.93</b> |

**BIG BEAR MUNICIPAL WATER DISTRICT  
REPORT TO BOARD OF DIRECTORS**

**MEETING DATE:** *November 17, 2011*

**AGENDA ITEM:** *6A*

**SUBJECT:**

**CONSIDER APPROVAL OF SHOREZONE ALTERATION PERMIT NO. S2011-01,  
MARINA POINT DEVELOPMENT ASSOCIATES DREDGE PROJECT**

**RECOMMENDATION:**

The General Manager and Lake Improvement Committee (Suhay and Smith) recommend the Board approve a Shorezone Alteration Permit for the above subject project.

**DISCUSSION/FINDINGS:**

Marina Point Development Associates (applicant) submitted a shorezone alteration application to the District on September 20, 2011. During the meeting on October 20, 2011 the Board reviewed draft versions of the project description and conditions of approval for the work. The Board received comments from the public, the applicant and their contractor and then directed Staff to modify some of the language in the Conditions of Approval. These changes were subsequently made and have been incorporated into the proposed final conditions of approval dated November 9, 2011. Additionally, the proposed project description language, also dated November 9, 2011, represents the culmination of several iterations and a lengthy telephone conference call between Tom Dodson and Associates, the applicant and the District.

The proposed work generally includes dredging within and around the old Cluster Pines marina, opening the marina to the Lake, and protecting exposed shoreline and jetty slopes from erosion. The Conditions of Approval have the general intent to document existing and as built bathymetry, define the most appropriate silt curtain alignment and depth, protect Lake water quality, provide Lake access during construction and to accurately reflect public and private property ownership.

The permit proposed to be issued would be valid through November 30, 2012. Payment for mitigation fees has already been received by the District during previous rounds of permit processing for work that was not completed.

The Lake Improvement Committee recommends the Board of Directors approve the attached Shorezone Alteration Permit No. S2011-01, which includes the Nov. 9, 2011 Project Description and Conditions of Approval.

**OTHER AGENCY INVOLVEMENT:** None

**FINANCING:** None

Submitted by: Scott Heule, General Manager

**BIG BEAR MUNICIPAL WATER DISTRICT**  
**SHOREZONE ALTERATION**  
**PERMIT NO. S2011-01 Marina Point Development Associates**

**Big Bear Municipal Water District (hereinafter District) hereby grants a Shorezone Alteration  
Permit to Marina Point Development Associates**

**Mailing Address:** P.O. Box 577

City: Del Mar

Phone: 619-417-4416

State: CA

Work:

P/code: 92014

Other: FAX 858-755-5820

**Property Address:** 39505 North Shore Drive

City: Fawnskin

APN: 034-082-15, 17-18, 20,2

State: CA

P/code: 92133

**The following Contractor will perform the work described:**

**Name:** Bear Valley Paving

**Address:** 41841 Garstin Rd.

City: Big Bear Lake

State: CA

P/code: 92315

Phone No: 909-866-4746

Cell: [REDACTED]

Fax: [REDACTED]

License Number: [REDACTED]

Verification Date: [REDACTED]

By: [REDACTED]

**Owner may complete the project described as:**

Marina Point Dredge and Jetty Protection Project

Owner shall abide by all shorezone regulations and best management practices as set forth the most current District Resolutions. Owner shall complete the project as described in the attached Shorezone Alteration Application submitted on 09-20-11 and Project Description dated 10-\_\_-2011 and subject to the attached Conditions of Approval dated 10-XX-2011.

**FEES (payable prior to commencement of project):**

**1. Application:**

- \$25 administrative fee (only for filing Notice of Exemption)
- \$100 ministerial project (other than head walk)
- \$250 head walk installation
- \$500 project requiring Negative Declaration under C.E.Q.A. process
- \$1,000 project requiring EIR/EIS under C.E.Q.A. process

**2. Mitigation for lake bottom disturbed:**

- \$200 shoreline erosion control project involving no fill other than placement of rock rip rap, installation of toe protection for a seawall, launch ramp installation and installation of steps
- \$3,000 other projects where additional mitigation may be required to reduce adverse impacts (per acre or any portion of an acre) \$ \_\_\_\_\_

**BIG BEAR MUNICIPAL WATER DISTRICT  
SHOREZONE ALTERATION**

**PERMIT NO. S2011-01 Marina Point Development Associates**

**PROJECT DESCRIPTION:**

1.  Ministerial:
- A. Place up to \_\_\_\_\_ cubic yards of:  
 rock  gravel  sand  vegetation  
along the shoreline adjacent to the above mentioned property for the purpose of shore protection above and below the high water line. (Rock rip rap shall be at least twelve (12) inches in diameter, and must be inspected by District personnel before placement)
- B. Install filter cloth prior to placement of rock rip rap. Owner shall contact District for inspection of filter cloth installation prior to placement of rock rip rap.
- C. Removal of \_\_\_\_\_ cubic yards of material from the Lake bottom for the purpose of:
- D. Install a seawall described as:
- E. Install a:  private launch ramp;  install steps to boat dock;  concrete slurry the existing rocks to stabilize around the launch ramp
- F. Install a head walk for pedestrian access to a dock gangway
2.  Non-Ministerial:
- A. Dredge up to 27,000 cubic yards of lake bottom for the purpose of harbour deepening and navigation channel and placement of up to 5600 yared of fill as described in the attached application.
- All dredge material shall be transported in such a manner as to prevent spillage on public or private property. Dredged material shall be disposed of at the following location:
- (1) Cluster Pines. Dredged material will be used on-site to build pads for future building needs. All dredge material shall be protected as described in RWQCB discharge permit from entering into Big Bear Lake.
- (2) Silt curtains shall be installed at a location and depth approved by the District and said curtain shall remain in place following completion of the project until removal is approved by District personnel. Silt curtain shall be clearly marked to warn Lake users of its existence. The silt curtain cannot be removed without District approval.
- (3) Quantities of material removed from the Lake shall be reported to the District on a weekly basis. A form for recording these amount will be provided by the District.
- B. Fill material (source and type of soil must be approved by the District) in the amount of 3720 cubic yards shall be placed for the purpose of marina jetty construction.
- C. Slope protection shall be used on the designated slopes in accordance with the application and subject to inspection and approval by the District.
- D. The following mitigation measures shall be provided during project to offset disturbance of fish and/or wildlife habitat:
- (1)  fish structures to be placed at location approved by District
- (2)  aerator systems)
- (3)  other
- E. Additional Conditions
- (1) Public access footpath to the Lake

**PROJECT COMMENCEMENT:**

**BIG BEAR MUNICIPAL WATER DISTRICT  
SHOREZONE ALTERATION  
PERMIT NO. S2011-01 Marina Point Development Associates**

1. Shorezone Alteration Permit S2011-01 is valid through November 30, 2011.
2. Owner shall notify the District five (5) days prior to commencement of the project.
3. As applicable, an executed copy of the grading permit from the County of San Bernardino, and/or executed copies from the State of California Department of Fish and Game, Corps of Engineers, Santa Ana Regional Water Quality Control Board, and any other applicable agencies' permits must be on file with the District prior to commencement of work.
4. Contractor shall obtain general liability insurance with limits of at least one-million dollars (\$1,000,000) per occurrence (\$2,000,000 aggregate, if used) for bodily injury, personal injury and property damage arising out of the activities and properties as described herein. Coverage shall include contractual liability covering the applicant's obligations. The District, its officers, employees, agents and volunteers shall be named as additional insureds. Contractor shall provide the District with a certificate of insurance and additional insured endorsement (Insurance Services Office Form CG 2026, or equivalent) before scheduled use. Any insurance, self-insurance or other coverage maintained by the Contractor shall not contribute to it. Coverage is to be placed with a carrier with an A.M. Best rating of at least A-:VII. Contractor shall insure, or be a qualified self-insured, under the applicable laws relating to workers' compensation coverage (Labor Code Section 3700), all of their employees working on or about the District's facilities. Contractor shall provide the District with a certificate of Workers' Compensation prior to commencement of work.
5. Contractor shall provide performance bond for 100% of the contract amount for the work covered under this permit prior to commencement of work.

**ADDITIONAL CONDITIONS:**

Should any of the terms and conditions described in this permit, or as set forth in the District's current shorezone resolution, not be met by Owner, permit shall be declared null and void.

This permit is granted with the understanding that Owner has complied with permit requirements of all other regulatory agencies. All legal fees or filing fees incurred as a result of the project shall be borne by the Owner.

This permit shall be available at the project location at all times, and Owner shall contact District for inspection when project is complete.

**PERMIT ACKNOWLEDGEMENT:**

\_\_\_\_\_  
Marina Point Development Associates

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
Contractor

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
General Manager  
Big Bear Municipal Water District

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**FINAL PROJECT INSPECTION BY DISTRICT**

\_\_\_\_\_  
Lake Manager

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

11\_09\_11

Shorezone Alteration Permit No. S2011-01, Conditions of Approval  
Marina Point Shorezone Alteration Application dated September 20, 2011

1. The applicant shall submit current bathymetry mapping prior to initiating any dredging activities. This mapping shall be submitted to the District on paper and in a geo-referenced format compatible with the Districts' electronic mapping software for review and approval prior to initiating any dredging activities.
2. The applicant shall provide bathymetry mapping to document the as built conditions of all new dredge/fill areas extending a minimum of 200 feet from the nearest point above the OHWM. This information shall be submitted to the District on paper and in a geo-referenced format compatible with the Districts' electronic mapping software within 30 days of completing any dredging activities for District review and approval.
3. The applicant shall not perform any work between December 1 and March 31 of any year in compliance with eagle habitat restrictions, unless otherwise authorized by the appropriate agency.
4. The applicant shall install silt curtains of sufficient length to extend at least two feet deeper than the water depth along their proposed alignment. Prior to dredging the owner shall document this condition has been met to the satisfaction of the District.
5. The applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) to the District for review and approval prior to initiating any disturbance of the lakebed below the OHWM. At a minimum this SWPPP shall identify all best management practices that will be implemented for all activities that directly affect lakebed below the ordinary OHWM and those construction activities that could indirectly affect the quality of water in the Lake. The SWPPP shall also include measures to address the accidental release of any hazardous or toxic material (such as petroleum product spills) that could enter into the Lake. The applicant shall demonstrate that all materials required to implement the SWPPP are in place before initiating construction activities that could degrade water quality of the Lake.
6. The applicant shall survey, file and record with the County of San Bernardino property lines on top of the marina jetties that accurately reflect actual post project private and public boundaries.
7. The applicant shall provide accommodation for the owners of Docks 727,728 and 729 (APN's 0304-151-34, -47 and -48) to access the lake during the course of construction.
8. Nothing contained in this permit shall relieve the Permittee from obtaining permits and entitlements from other governmental agencies. Permittee shall provide District with copies of such other permits as are required for the work prior to the commencement of the work.
9. The applicant shall apply for the necessary permits from the appropriate agencies to allow future maintenance dredging tributary to all dredged areas identified in the current shorezone alteration application.

**Marina Point  
Project Description  
11/09/11  
Shorezone Alteration Permit No. 2011-01**

Introduction

The Marina Point Development Associates (MPDA) property consists of a 13.51-acre site located along State Highway 38 near the town of Fawnskin on the north shore of Big Bear Lake and at the northeast edge of Grout Bay. The entire shoreline and marina jetties of the Marina Point Property are part of a 4.5-acre historic landfill constructed in the late-1960s that created the existing marina. At that time the lake bottom surrounding the landfill in the marina was disturbed by dredge and fill operations. The original marina construction included rip-rap protection along all of the shoreline and both sides of the jetty slopes.

In 1983 the County of San Bernardino authorized the development of a condominium project to be located on the 12 acres adjacent to the marina. In 1989, the tract map (TM) expired and MPDA was required to submit a new TM and Planned Development Permit Application. The County revised the original EIR as the lead agency in accordance with the California Environmental Quality Act (CEQA) which it adopted and certified in December 1991 after consultation with relevant agencies, including the District. The attached letter from San Bernardino County verifies that the Marina Point Planned Development County permits remains "active." Refer to Appendix 1. The implementation of this project has been on hold for the past 28 years for a variety of reasons, including extensive litigation and the requirement to obtain regulatory permits from a number of agencies, including the Big Bear Municipal Water District (District). The project developer, MPDA, has submitted a Shorezone Alteration Application to the District (September 20, 2011). A copy of the application is provided as Appendix 2 to this document. The project description in the application is superseded by this November 9, 2011 version.

Over the intervening period since approval of the Marina Point Project in 1983, the developer has carried out improvements to the existing marina. Shore-zone improvements were carried out in the 1990's and 2000's in accordance with a 1993 Shorezone Alteration Permit. The current permit application is intended to address additional work that needs to be completed at the marina, in particular activities that are needed to stabilize the marina levees; complete dredge activities; and control runoff from North Shore Drive (State Highway 38). In the applicant's own words the project is summarized as follows: *"The remaining dredging work is limited to: (i) removal of silt within the marina; (ii) 200 linear feet of the partially dredged lake bottom along the west shoreline to connect the existing dredged areas and 70 linear feet at the north end of the basin to connect to an existing boating channel west of Marina Point to improve lake circulation for water quality and boating safety during lower lake levels (iii) repair of the east shoreline around the Caltrans drainage pipe. Upon completion of the dredging and repair work, all of the shoreline will be protected with rock or slopes will be graded flatter than 3:1. A more detailed description of the activities that would be permitted if the Shorezone Alteration Application is approved by the District is provided below.*

Project Location

According to the current Shorezone Alteration Application (Appendix 2) the total acreage of the lake bottom to be disturbed by the project encompasses approximately 8.31 acres located on the north shore of Big Bear Lake. The project site address is 39505 North Shore Drive,



Fawnskin, CA 92315, and the site encompasses the following Assessor Parcel Numbers (APNs) 034-082-15, 17, 18, 20 and 21. Figure 1 shows the regional location of the project site and Figure 2 the area location on the USGS – Fawnskin Quadrangle, 7.5 Minute Series Topographic Map. Figure 3 shows the proposed Lake Enhancement Plan submitted by the Applicant. Figure 4 is a Google Aerial Photograph of the site and immediate surrounding area.

### Project Characteristics and Activities

The applicant's Shorezone Alteration Application consists of construction activities to complete erosion control features at the existing marina and modify the marina interior (dredging) and areas immediately adjacent to the exterior levees of the marina. This application does not include any requests for future marina operating conditions. Thus, the only activities under consideration by the District at this time consist of construction activities to complete the marina's broad physical features while restoring erosion damage and finally, armoring the marina to minimize future erosion. As noted above, Figure 3 shows the proposed construction plans and Figures 4 through 8 show the cross-sectional changes in the site topography (aboveground landforms) and bathymetry (lake bottom topography).

The following construction activities would be implemented if the applicant's Shorezone Alteration Application is approved by the District.

1. Complete the shoreline protection along the east side of the Marina Point Property by undertaking the following actions: (i) install a 190-foot temporary, 15-foot wide haul road along the top of the proposed slopes on the east side of the drainage as depicted on Sheet 1 of 6, which is to be removed upon completion of the work; (ii) replace and extend the existing undersized 24-inch Caltrans pipe with a 48-inch pipe; (iii) replace the temporary quarry waste and check dam placed in February 2005 with a rip-rap energy dissipater at the 48-inch pipe outlet; (iv) grade the west bank and the east bank of the drainage leading to Big Bear Lake to create a variable 2:1 to 5:1 slope along the property line to repair existing erosion along the banks. This work would dredge 640 cubic yards (cy) of sediment and require 2,300 cy of fill to repair the slopes. This work will impact 1.05 acres below the ordinary high water mark (OHWM) of Big Bear Lake.

It is estimated that approximately 200 cy of soil will be required to install the proposed haul road. The applicant proposes to obtain this material from the upland stockpile of prior dredged material. The purpose of the temporary haul road is to provide access to transport material to repair the erosion and protect the shoreline slope on the east side of the Caltrans drainage.

The highway itself will be raised by approximately three feet in accordance with Caltrans approved design plans. The 48-inch culvert is proposed to be a corrugated metal pipe (CMP). The applicant indicates that no new rip-rap will be installed for energy dissipation because this facility can be constructed with the existing rock material previously placed at the outlet of the 24-inch culvert. The new culvert will comply with Caltrans design standards and additional flow from the new paved road area will be treated prior to discharge into the Lake.

2. Dredge the sediment from the inside of the existing marina to a depth of 6,725 MSL with bottom dimensions of 260 by 400 feet. This dredge would remove approximately 22,765 cy of sediment. The 4,925 cy of material previously used to temporarily close the south side of the marina will be removed when all other items of work are completed to

reopen the marina to Big Bear Lake. In the interim the marina will continue to be used as a desiltation basin. This work includes removal of the rip-rap and quarry waste placed at the marina opening jetties and placing 3,270 cy of fill below the OHWM by outside of the jetties for temporary protection. This work also requires 3,270 cy of fill below the OHWM for the marina opening. All four sides of the inside of the marina jetty are to be finished to the existing configuration with 2:1 slopes. The slopes on the inside of the marina jetty are to be re-protected from erosion by placing 2,630 cy of quarry waste (8-inches minus) rock on all slopes and 910 cy of rip-rap at the south entrance. This repair and maintenance work will impact a total of 4.80 acres below the OHWM of Big Bear Lake.

According to the applicant the 22,500 cy of dredged material under this action will be deposited on the upland site. Drainage from the stockpiled dredged material will convey dewatering runoff to two existing desiltation basins adjacent to the marina and thence into the marina desiltation basin. The applicant indicates that the dredged material will remain on the upland portion of the property and is proposed to be used as part of the site grading.

The proposed 3,270 cy of fill below the OHWM will be obtained from the previously dredged and dried material on the upland portion of the project site. According to the applicant the rock for slope erosion protection will be delivered to the site by the contractor under the existing approved County grading plan and is likely to be on the project site prior to initiation of construction under the District's Shorezone Alteration Application.

3. Complete the balance of the exterior sides of the marina jetties. The marina jetties have been partially armored with a combination of two feet of rip-rap (12-inches plus) over one foot of quarry waste (8-inches minus) material in accordance with the ACOE ICMOs. The project proposes to repair current erosion and complete the slope protection by the placement of rip-rap and quarry waste from the top of the existing rip-rap to the top of the slopes at elevation  $\pm 6,744.5$  MSL or higher. This quantity of slope protection fill is approximately 350 linear feet along the east side of the east jetty with a combination of two feet of rip-rap (12-inches plus) over one foot of quarry waste (8-inches minus). The work consists of the repair of current erosion and placement of approximately 830 cubic yards of rip-rap. This work will impact 0.26 acres below the OHWM.

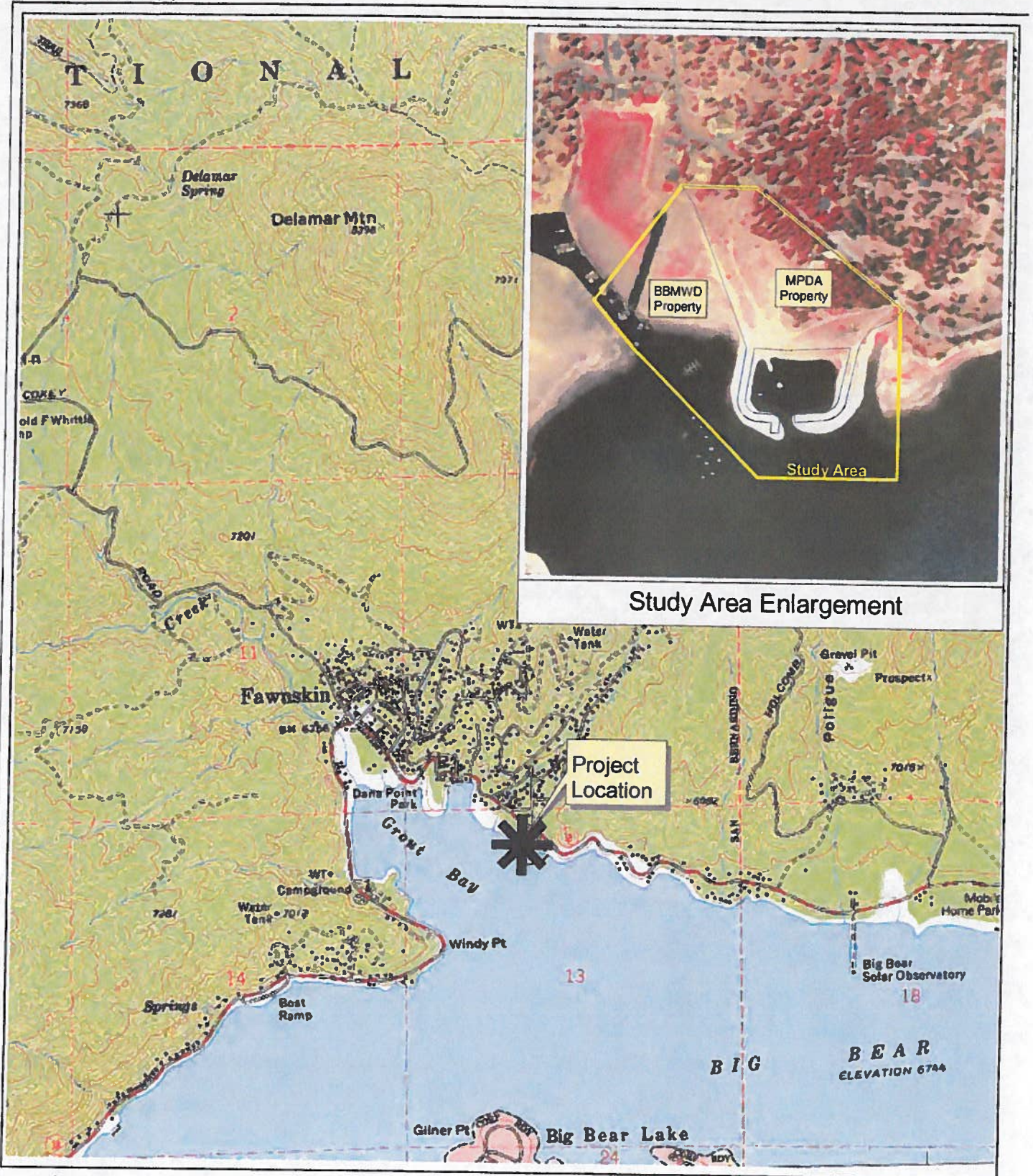
According to the applicant the rock for slope erosion protection will be delivered to the site by the contractor under the existing approved County grading plan and is likely to be on the project site prior to initiation of construction under the District's Shorezone Alteration Permit. Erosion repair will consist of installing quarry waste on the slope with rip-rap placed on the top of this material.

4. Complete a channel adjacent to the west shoreline of the property by continuing the minimum 50-foot bottom width channel from the end of the existing dredged channel by the west jetty, then north along the shoreline to connect to an existing channel (Coletta dredge) at the northwest end of the basin constructed in July 2003 and February 2005. This work will remove sediment from the lake-bottom and provide circulation of lake water for better water quality and boating safety at lower lake levels, as depicted on Sheet 1 of 6. This area will be dredged from a depth of 6,725 MSL at the south end to 6,730 MSL with an undulating bottom for shallow water fish habitat. Portions of the channel will be dredged to 5:1 side slopes for erosion protection. This dredge will remove approximately 3,240 cy of material below the OHWM.

To complete the shoreline protection along the western side of the property, the proposal is a combination of graduated slope and rip-rap as depicted on cross-sections C and E on Figures 6 and 8. The proposal would include 400 linear feet of rip-rap slope protection on slopes ranging from 2:1 to 3:1; create a variable slope from 3:1 to 12:1 for 300 linear feet; and a 12:1 slope for 100 linear feet. The work requires 5,420 cy of fill below the OHWM. Along the west side where slopes vary from 2:1 to 3:1, slope protection similar to the protection on the exterior of the jetties will be required. This includes 211 cubic yards of quarry waste and 423 cy of rip-rap placed below the OHWM. A 190-foot portion of an existing 15-foot wide haul road will be stabilized along the top of the proposed slopes below the OHWM, and a temporary 24-inch drain pipe will be installed. The road and pipe will be removed upon completion of the work. The location of the haul road is depicted on Figure 3. This work will impact a total of 2.07 acres below the OHWM of Big Bear Lake.

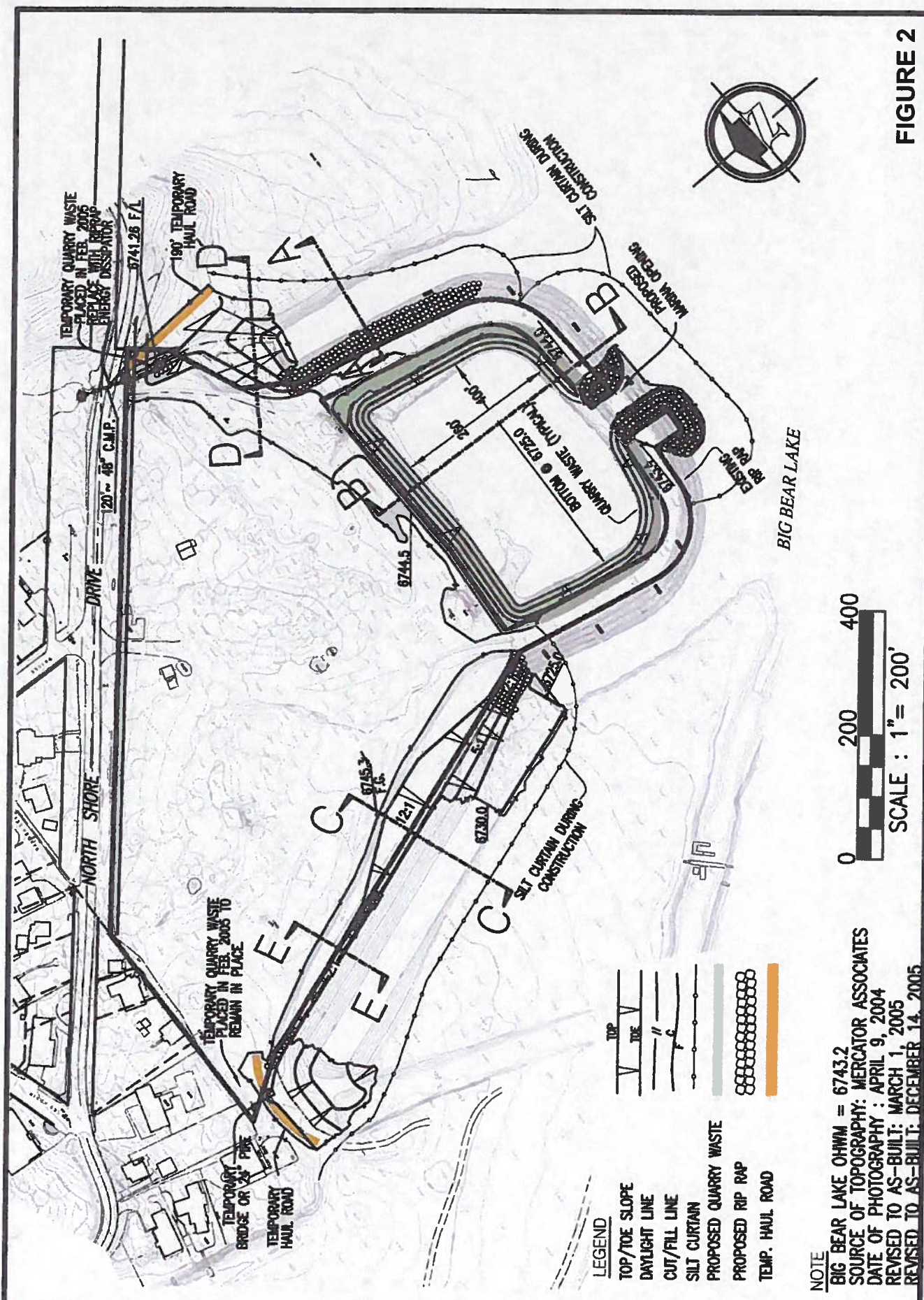
5. The applicant intends to perform dredging (excavation) operations utilizing track and rubber tire excavation equipment and a mechanical crane providing lake level is not too high. If lake levels and or the excavation equipment cannot reach all areas proposed for dredging, the applicant intends to use a hydraulic dredge to accomplish the design depths and extent of dredging operations. The hydraulic dredge would be mounted on a barge and dredge discharge would be pumped through a 6-inch hose for discharge into a bermed receiving area on the upland portion of the site (see attached drawing, "Erosion Control Plan and Pre-Construction Drainage Map"). Other equipment that will be used during the project includes a dozer, loader and dump trucks.

## **FIGURES**



**Project Vicinity Map**  
Marina Point  
Image source: USGS 7.5" Fawnskin, CA Quadrangle

**Figure 1**



**FIGURE 2**

JOB NO. 843E  
 DATE: 6/30/11  
 SHEET 4 OF 9

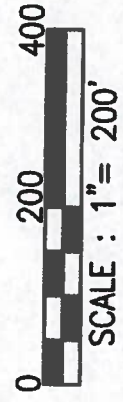
# MARINA POINT

LAKE ENHANCEMENT PLAN  
 SHORELINE PROTECTION

**SITE DESIGN ASSOCIATES, INC.**  
 1016 BROADWAY STE "A" EL CAJON, CALIFORNIA 92021  
 (619) 442-8467 FAX (619) 442-8417  
DMG: 84.5; Mercho; Point; Study; ACE; 2011.dwg

**NOTE**  
 BIG BEAR LAKE OHWM = 6743.2  
 SOURCE OF TOPOGRAPHY: MERCATOR ASSOCIATES  
 DATE OF PHOTOGRAPHY : APRIL 9, 2004  
 REVISED TO AS-BUILT: MARCH 1, 2005  
 REVISED TO AS-BUILT: DECEMBER 14, 2005

- LEGEND**
- TOP TOE SLOPE
  - DAYLIGHT LINE
  - CUT/FILL LINE
  - SILT CURTAIN
  - PROPOSED QUARRY WASTE
  - PROPOSED RIP RAP
  - TEMP. HAUL ROAD



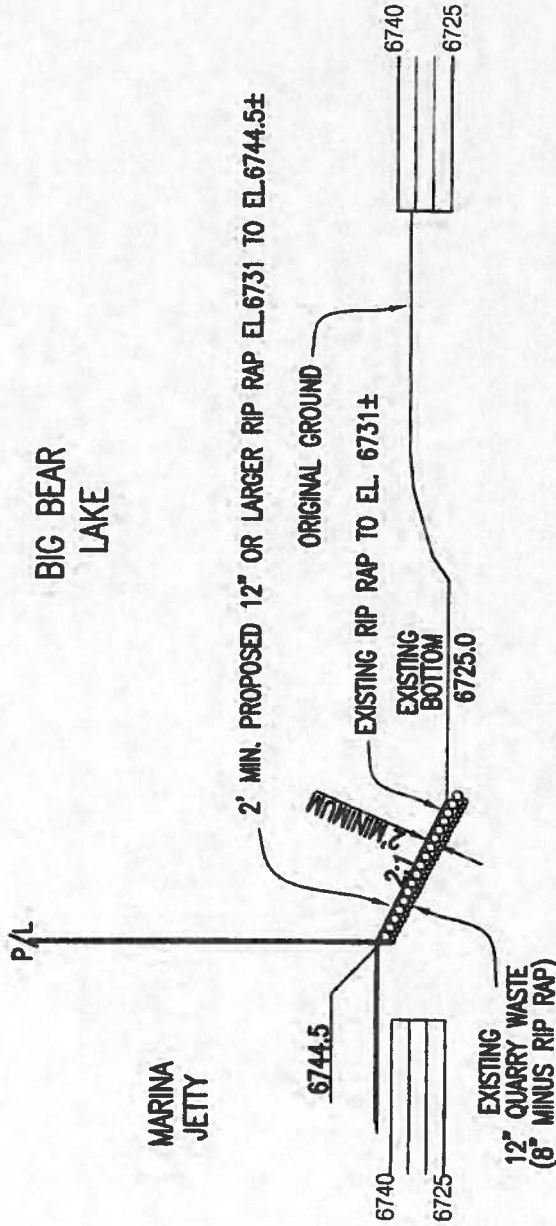


© 2010

FIGURE 3

Image County of San Bernardino

© 2011 Google



**SECTION A-A**  
EAST SIDE SECTION

**FIGURE 4**  
SCALE : 1" = 50'

**NOTE**  
BIG BEAR LAKE OHWM = 6743.2



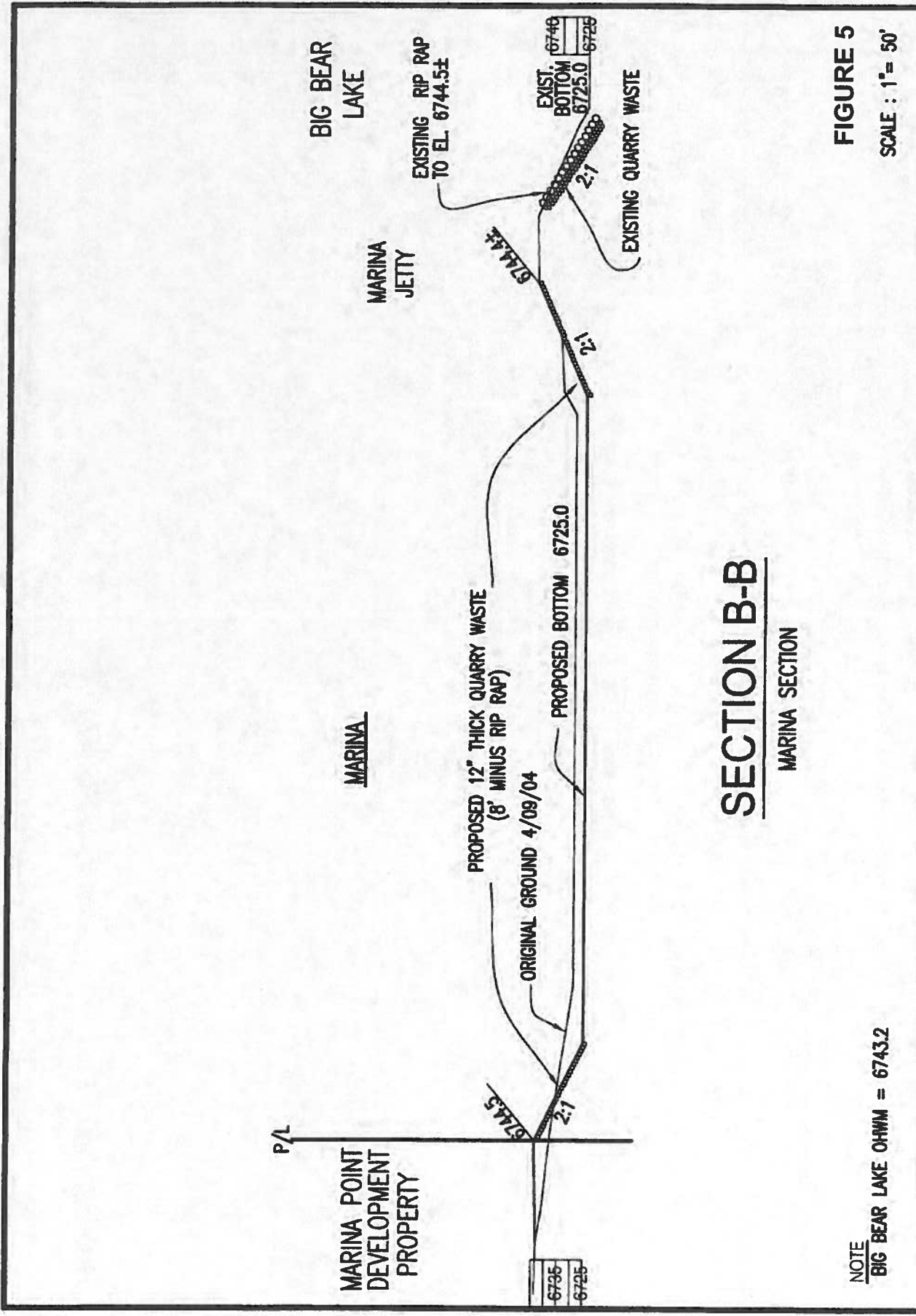
**SITE DESIGN ASSOCIATES, INC.**  
1016 BROADWAY, STE "A" EL CAJON, CALIFORNIA 92021  
(619) 442-8487 FAX (619) 442-8417  
WWW: SDAE Marine Dept. 310-408-2011, JWC

LAKE ENHANCEMENT PLAN  
SHORELINE PROTECTION

**MARINA POINT**

|               |
|---------------|
| JOB NO. 843E  |
| DATE: 8/30/11 |
| SHEET 5 OF 9  |





**SECTION B-B**  
MARINA SECTION

**FIGURE 5**  
SCALE : 1" = 50'

**MARINA POINT**

LAKE ENHANCEMENT PLAN  
SHORELINE PROTECTION

MARINA POINT DEVELOPMENT PROPERTY

MARINA JETTY

BIG BEAR LAKE

P/L

PROPOSED 12" THICK QUARRY WASTE  
(8" MINUS RIP RAP)

ORIGINAL GROUND 4/09/04

PROPOSED BOTTOM 6725.0

EXIST. RIP RAP TO EL. 6744.5±

EXIST. BOTTOM 6725.0

EXISTING QUARRY WASTE

6735  
6725

6740  
6725

3:1

2:1

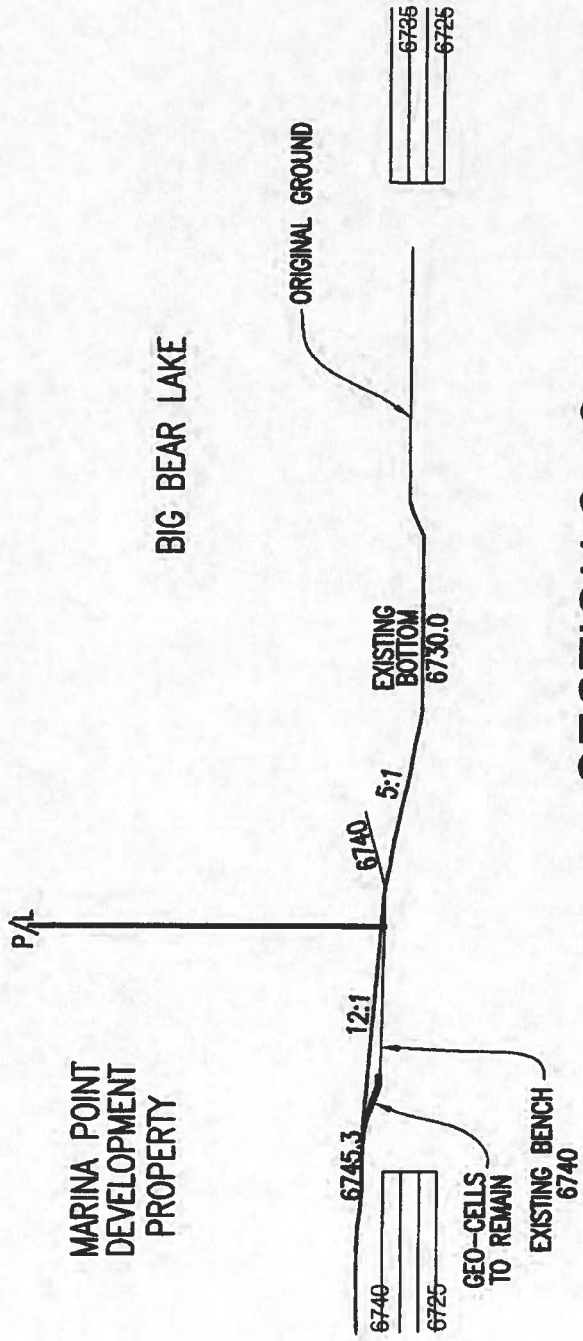
2:1

3:1

NOTE  
BIG BEAR LAKE OHWM = 6743.2

JOB NO. 843E  
DATE: 8/30/11  
SHEET 6 OF 9

SITE DESIGN ASSOCIATES, INC.  
1016 BROADWAY, STE "A" EL CAJON, CALIFORNIA 92021  
(619) 442-8467 FAX (619) 442-8417  
DRG. M.S.E. Marina Point Shoreline Protection



**SECTION C - C**  
WEST SIDE SECTION

NOTE  
BIG BEAR LAKE OHWM = 6743.2

FIGURE 6  
SCALE : 1" = 50'

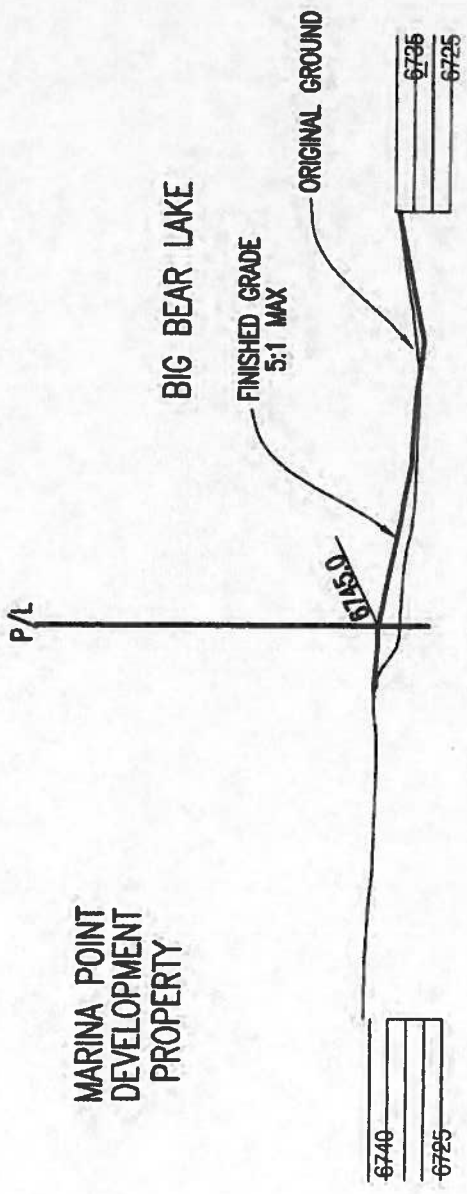


SITE DESIGN ASSOCIATES, INC.  
1016 BROADWAY STE-A EL CAJON, CALIFORNIA 92021  
(619) 442-8467 FAX (619) 442-8417  
P.O. BOX 10000 El Cajon, CA 92011

LAKE ENHANCEMENT PLAN  
SHORELINE PROTECTION

MARINA POINT

|              |
|--------------|
| JOB NO. 843E |
| DATE 6/30/11 |
| SHEET 7 OF 9 |



MARINA POINT  
DEVELOPMENT  
PROPERTY

**SECTION D-D**  
EAST SIDE SECTION

**FIGURE 7**  
SCALE : 1" = 50'

NOTE  
BIG BEAR LAKE OHWM = 6743.2

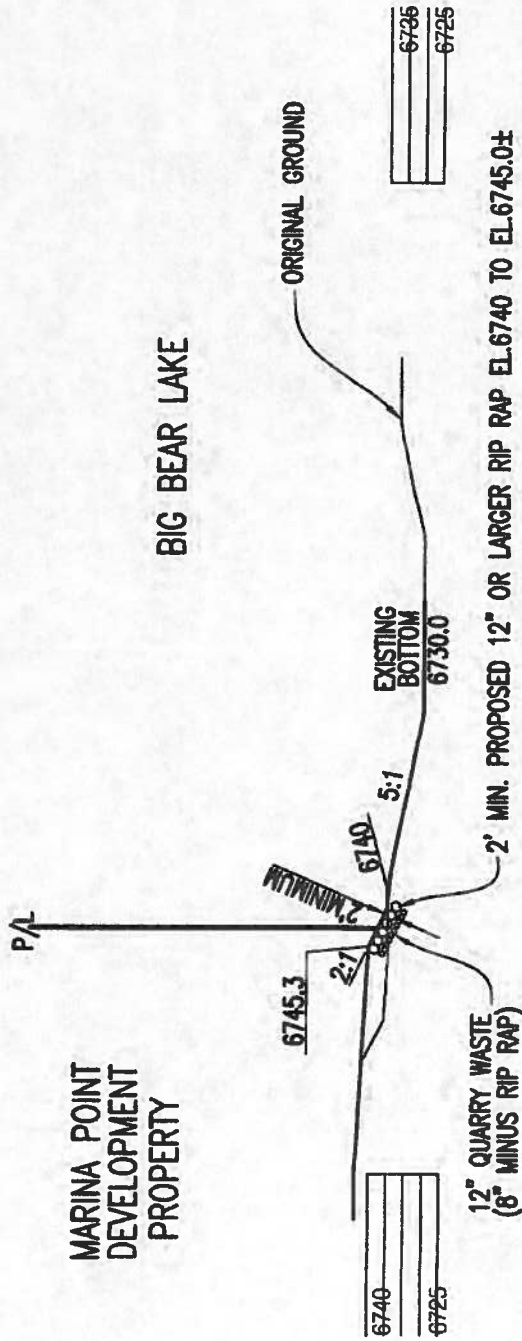


SITE DESIGN ASSOCIATES, INC.  
1016 BROADWAY, SUITE "A"  
EL CAJON, CALIFORNIA 92021  
(619) 442-9467 FAX (619) 442-9417  
OFFICE: 843E Marina Point Street - El Cajon, CA 92021

LAKE ENHANCEMENT PLAN  
SHORELINE PROTECTION

**MARINA POINT**

|               |
|---------------|
| JOB NO. 843E  |
| DATE: 6/30/11 |
| SHEET 8 OF 9  |



# SECTION E-E

WEST SIDE SECTION

NOTE  
BIG BEAR LAKE OHWM = 6743.2

FIGURE 8

SCALE : 1" = 50'

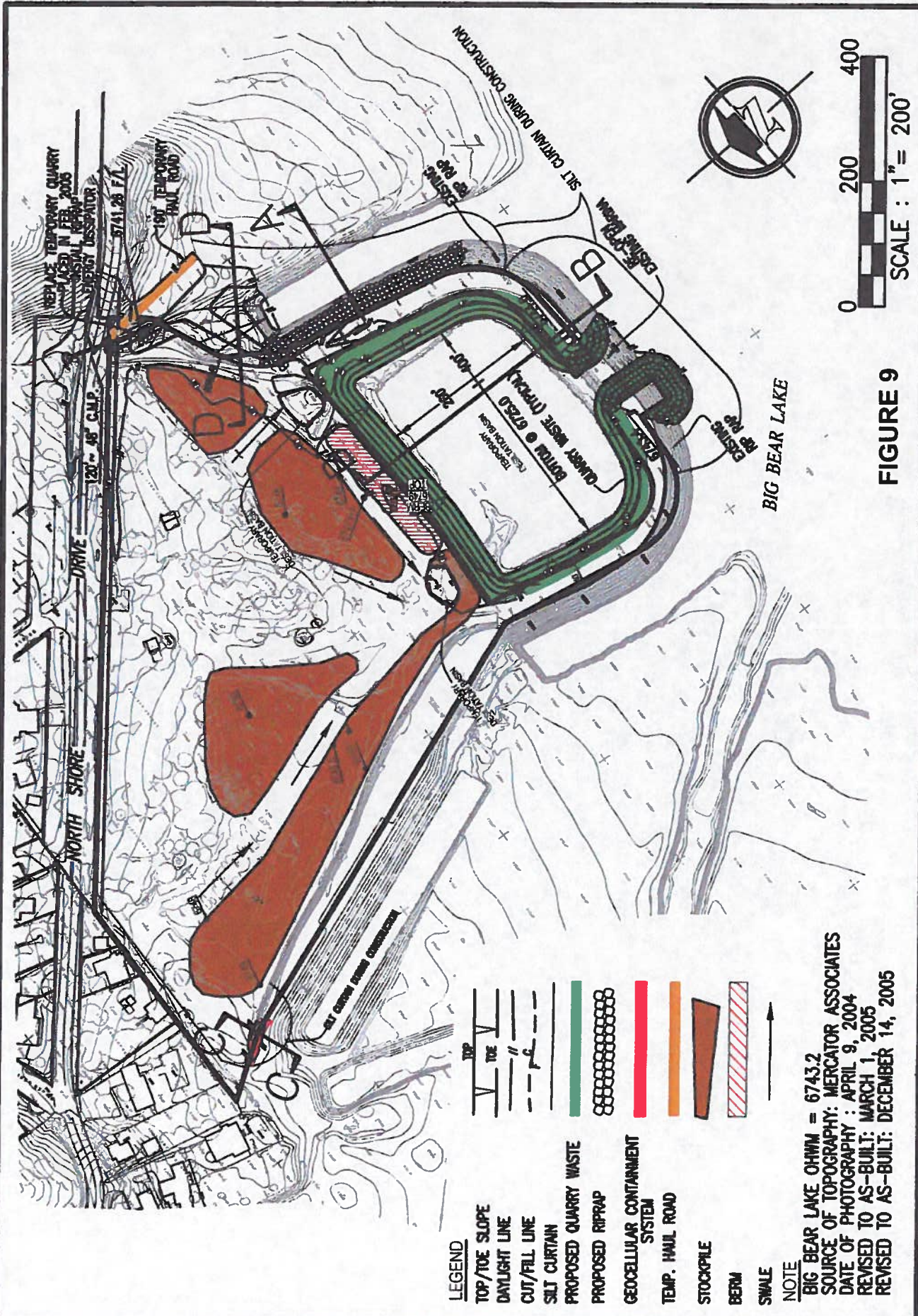


SITE DESIGN ASSOCIATES, INC.  
1016 BROADWAY, STE. "A" EL CAJON, CALIFORNIA 92021  
(619) 442-8467 FAX (619) 442-8417  
DRG. B.A. Marina Point Shoreline Protection

LAKE ENHANCEMENT PLAN  
SHORELINE PROTECTION

MARINA POINT

JOB NO. 843E  
DATE: 6/30/11  
SHEET 9 OF 9

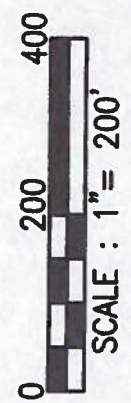


**LEGEND**

|                                |            |
|--------------------------------|------------|
| TOP/TOE SLOPE                  | — V —      |
| DAYLIGHT LINE                  | — // —     |
| CUT/FILL LINE                  | — - - -    |
| SILT CURTAIN                   | —   —      |
| PROPOSED QUARRY WASTE          | ██████████ |
| PROPOSED RIPRAP                | ▤▤▤▤▤▤▤▤   |
| GEOCELLULAR CONTAINMENT SYSTEM | ▬▬▬▬▬▬▬▬   |
| TEMP. HAUL ROAD                | ▬▬▬▬▬▬▬▬   |
| STOCKPILE                      | ▭▭▭▭▭▭▭▭   |
| BERM                           | ▬▬▬▬▬▬▬▬   |
| SWALE                          | ▨▨▨▨▨▨▨▨   |

**NOTE**

BIG BEAR LAKE OHWM = 6743.2  
 SOURCE OF TOPOGRAPHY: MERCATOR ASSOCIATES  
 DATE OF PHOTOGRAPHY: APRIL 9, 2004  
 REVISED TO AS-BUILT: MARCH 1, 2005  
 REVISED TO AS-BUILT: DECEMBER 14, 2005



**FIGURE 9**

**SITE DESIGN ASSOCIATES, INC.**  
 10116 BROADWAY, STE "A" EL CAJON, CALIFORNIA 92021  
 (619) 442-8467 FAX (619) 442-8417  
 5755 LISA BLVD, 2ND FLOOR, SAN DIEGO, CA 92121

**LAKE ENHANCEMENT PLAN**  
**STOCKPILE/DREDGE EXHIBIT**

**MARINA POINT**

JOB NO. 843E  
 DATE: 7/12/11  
 SHEET 1 OF 5

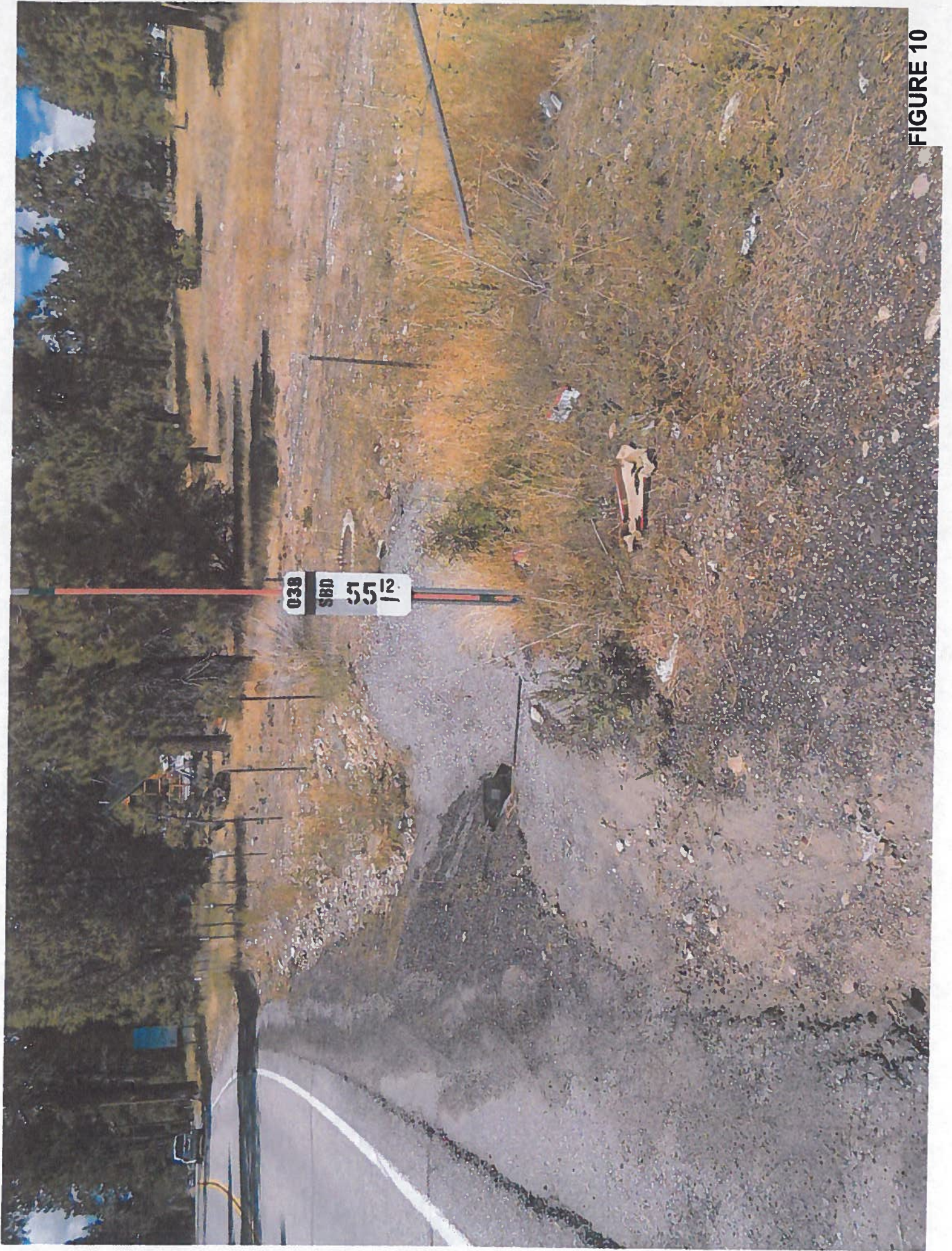


FIGURE 10

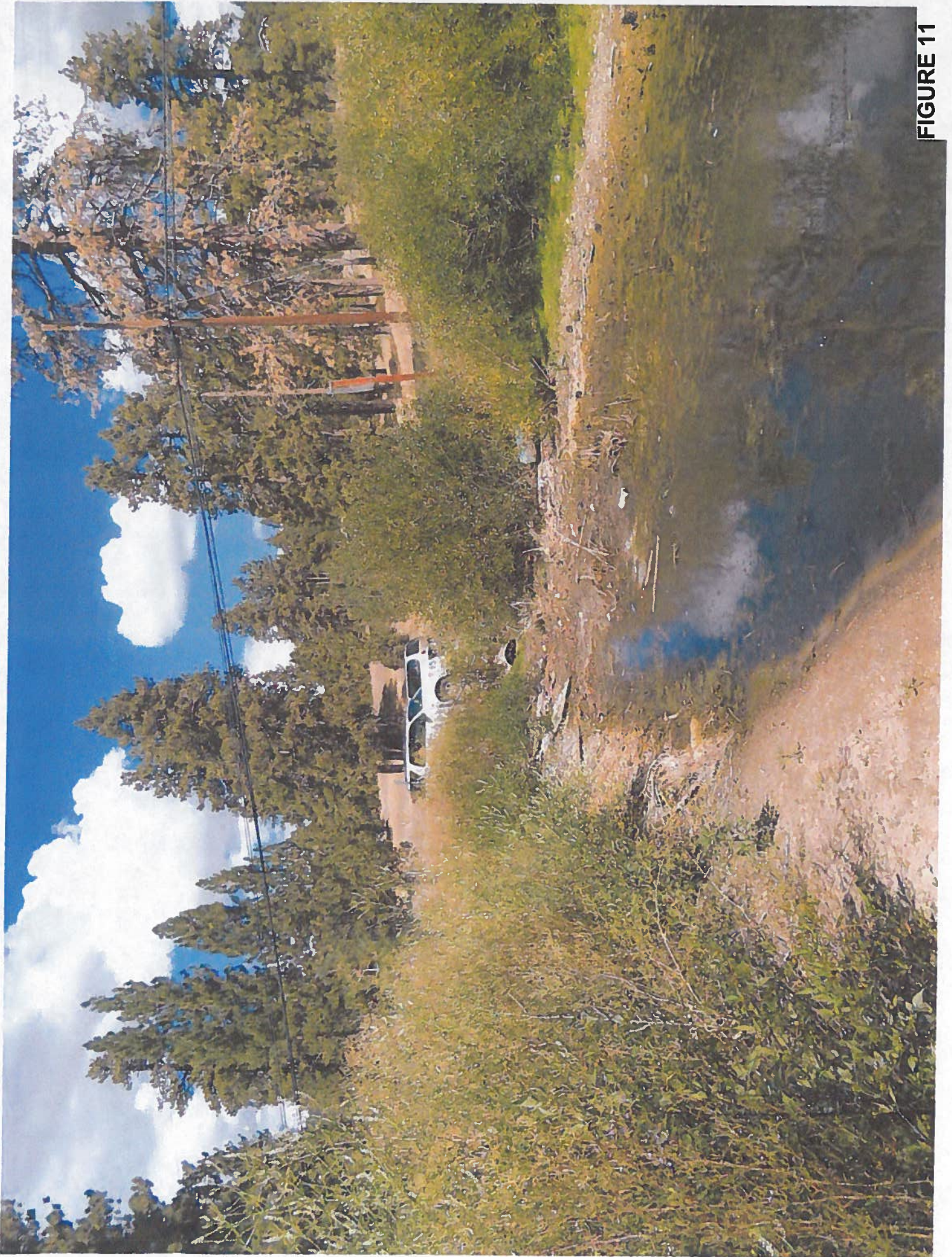


FIGURE 11

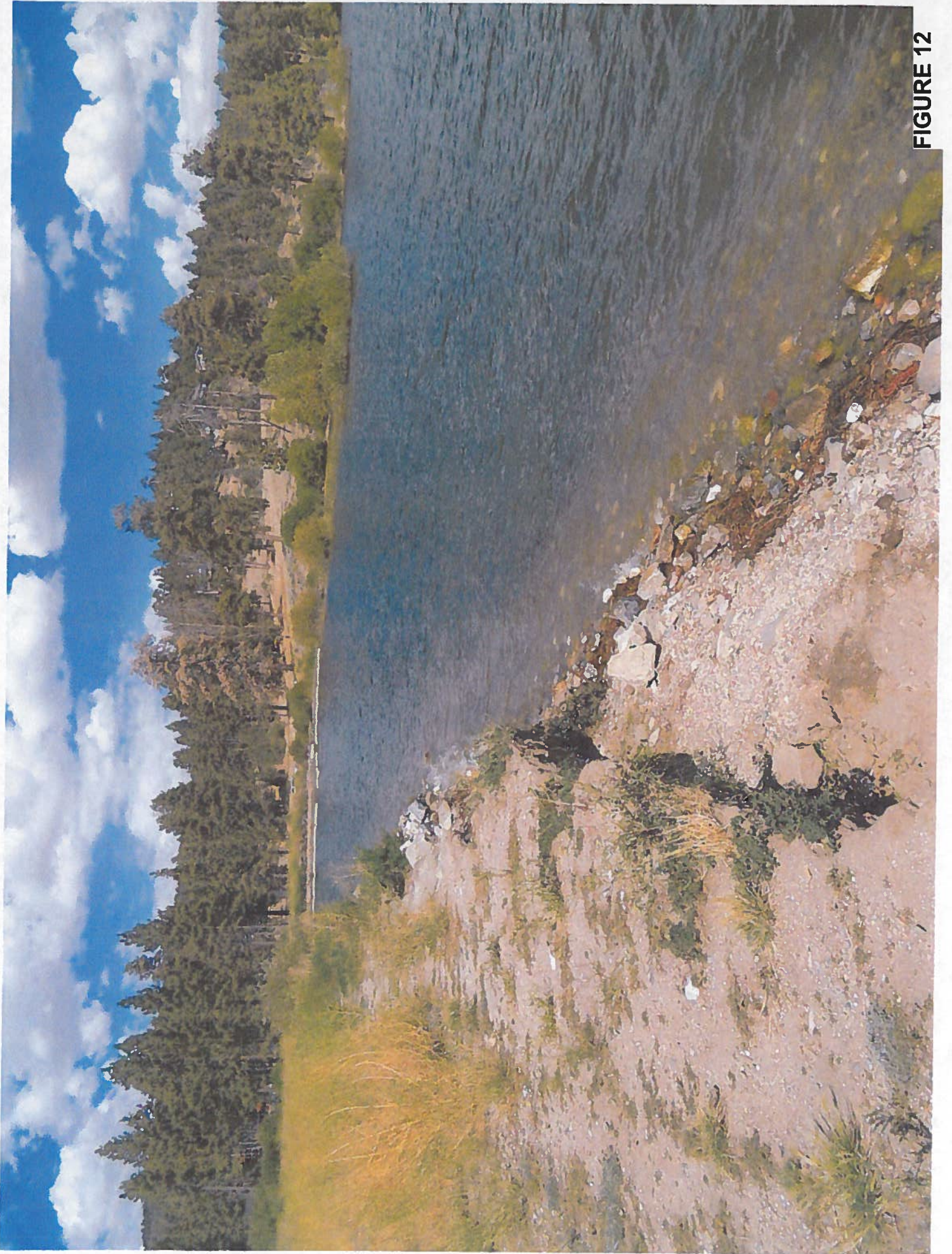


FIGURE 12





FIGURE 13

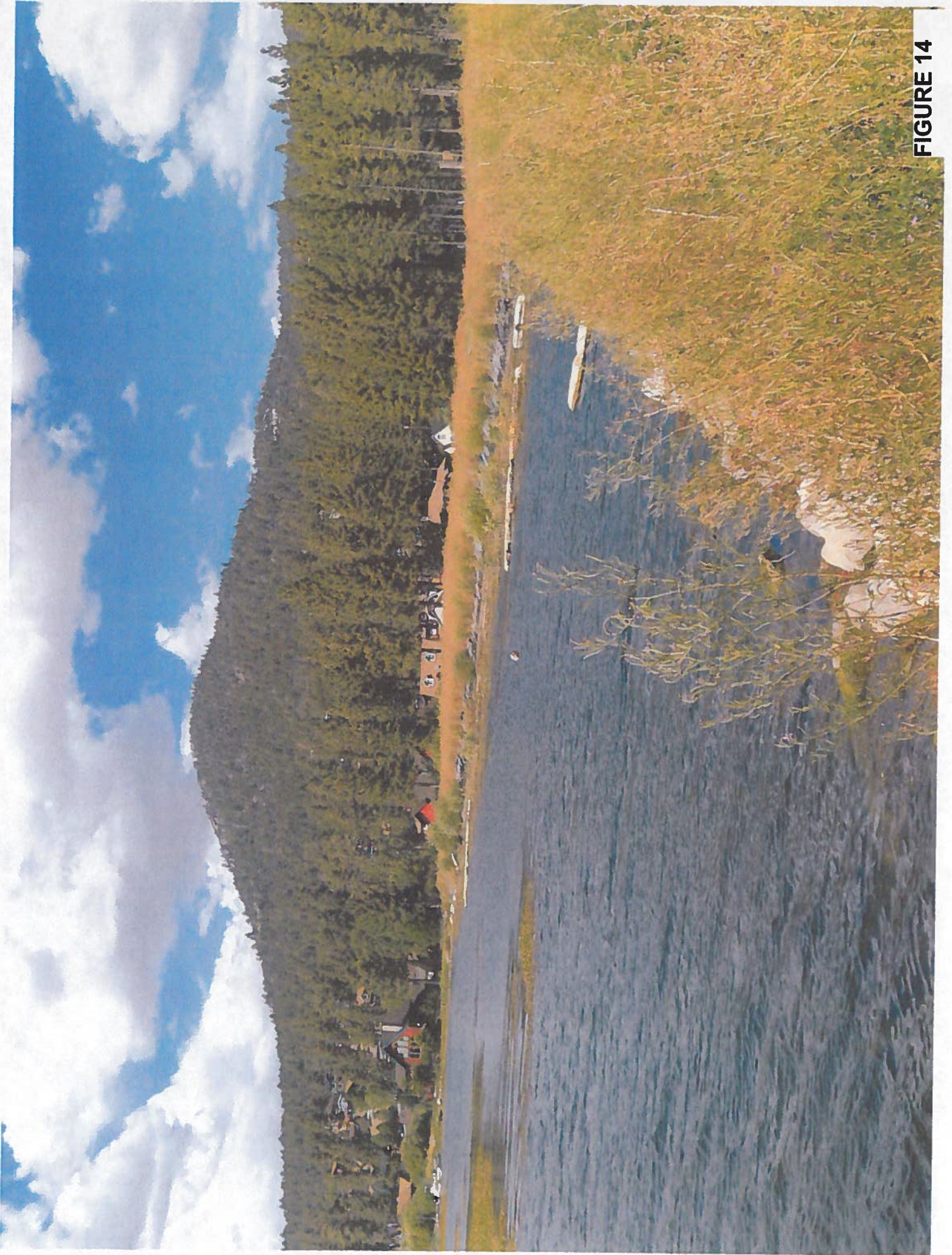


FIGURE 14

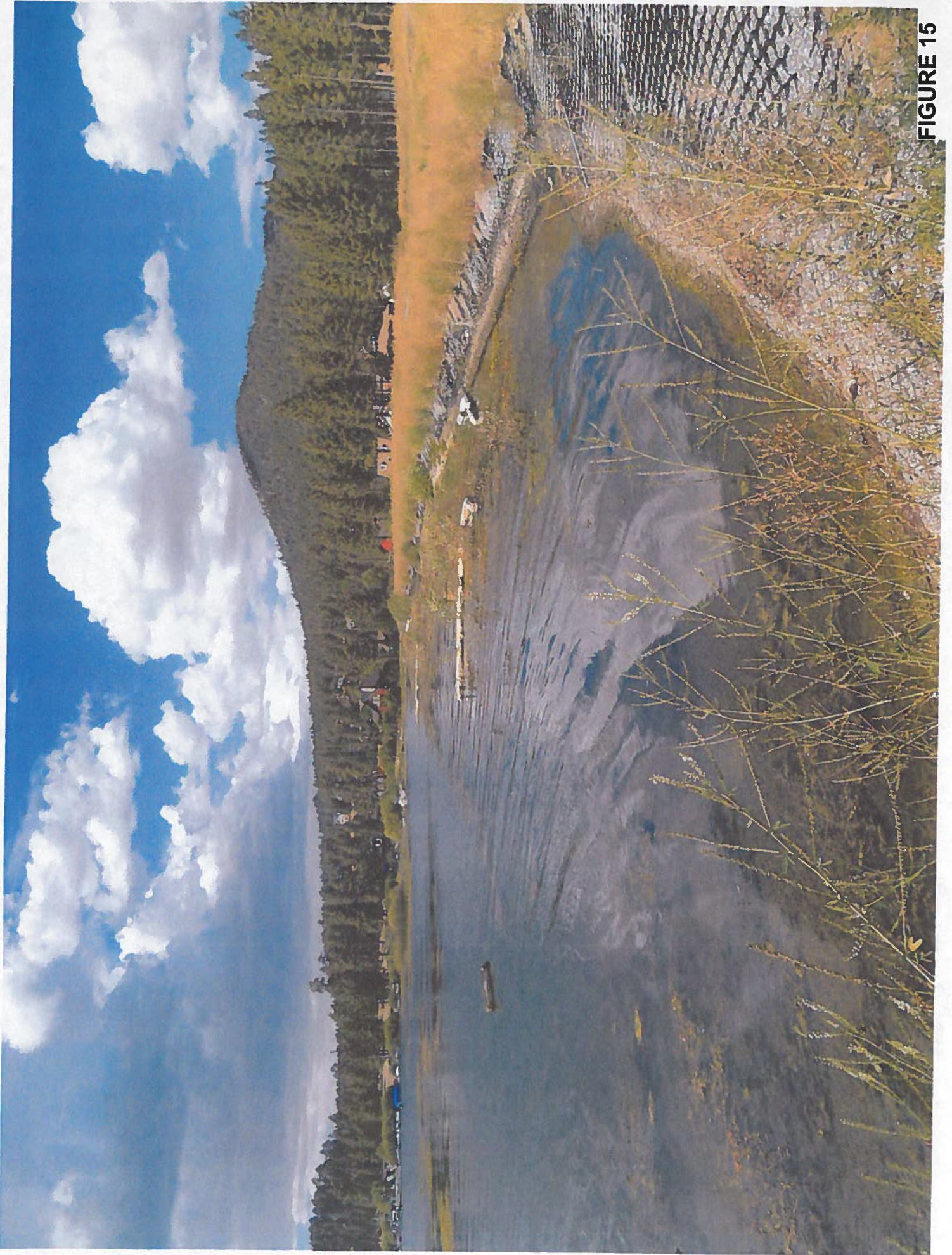


FIGURE 15

## **APPENDIX 1**

# LAND USE SERVICES DEPARTMENT



COUNTY OF SAN BERNARDINO

ADMINISTRATIVE OFFICE  
385 North Arrowhead Avenue • San Bernardino, CA 92415-0187  
(909) 387-4141 Fax (909) 387-3223  
<http://www.sbcounty.gov/landuseservices>

CHRISTINE KELLY  
Director

September 27, 2011

Irving Okovita  
Okon Development Co.  
P.O. Box 577  
Del Mar, CA 92410

**SUBJECT: MARINA POINT PLANNED DEVELOPMENT – STATUS OF ENVIRONMENTAL IMPACT REPORT AND FINAL DEVELOPMENT PLAN, BIG BEAR/3<sup>RD</sup> SUPERVISORIAL DISTRICT, P201000499.**

Dear Mr. Okovita,

This letter is in response to your request for the record concerning the Environmental Impact Report (EIR) and Final Development Plan for the Marina Point Project. On December 9, 1991, the County Board of Supervisors approved the EIR, Tentative Tract 12217, the Preliminary Development Plan and Final Development Plan for the Marina Point Project. Tract 12217 was subsequently recorded on December 21, 2000.

With the recordation of Tract 12217, the EIR and Final Development Plan for the Marina Point Project remain active. This project and all development plans (grading plans, building plans, etc.) shall be prepared and constructed in conformance with the originally approved EIR, Final Development Plan and the Conditions of Approval as approved on December 9, 1991. As the developer you are responsible to ascertain and comply with all laws, ordinances, regulations and any other requirements of Federal, State, County and Local agencies as are applicable to the development and operation of the approved land use and project site.

Sincerely,

  
Chris Warrick, Planner  
County Planning Division

cc: Dena Smith, Deputy Executive Officer  
Christine Kelly, Director of Land Use Services  
Bobby Lewis, Planning Director  
Bart Brizzee, County Counsel  
Ken Discenza Site-Design Associates

**APPENDIX 2**

**BIG BEAR MUNICIPAL WATER DISTRICT**

**P.O. Box 2863, Big Bear Lake, CA 92315**

**Phone 909-866-5796**

**FAX 909-866-6485**

|                        |                            |
|------------------------|----------------------------|
| <u>Office Use Only</u> | <i>Resubmitted</i>         |
| Date submitted:        | <i>8/29/11 9/20/11</i>     |
| MWD permit fee:        | <i>\$500.00 8/29/11</i>    |
| County filing fee:     | <i>9/20/11</i>             |
| Mitigation fees:       |                            |
| Received by:           | <i>M. Stephenson Shead</i> |

**SHOREZONE ALTERATION APPLICATION**  
**(Resolution attached)**

Applicant must complete Sections 1, 2 and 3 for the application to be processed. Section 3, parts A, B, C, D, E or F should be completed as appropriate for the specific project. Contact Big Bear Municipal Water District for additional information.

**Section 1. Applicant Information**

- A. Applicant name – Marina Point Development Associates
- B. Mailing address – PO Box 577, Del Mar CA 92014
- C. Telephone numbers: Home (858) 755-2616, Business (619) 417-4416, FAX (858) 755-5820
- D. Project street address 39505 North Shore Drive, Fawnskin CA 92315
- E. Project assessor's parcel number 034-082- 15, 17, 18, 20, & 21  

Applicant must provide a legal record of survey showing the lakeside boundary of the property to be altered; permanent monuments shall be set for the lakeside boundaries.
- F. Name of the responsible party if other than applicant \_\_\_\_\_
- G. Assessor's Parcel Numbers (APN) of property adjacent to project: SEE ATTACHED LIST
- H. Proposed date of project construction: from August 15, 2011 to Nov.30, 2012
- I. Photograph of project area must be submitted with application.
- J. Contractor information: - Bear Valley Paving Inc.  
41841 Garstin Rd  
Big Bear Lake, Ca 92315  
(909) 866-4746
- K. Estimated cost of project: \$385,000

I hereby certify that this information is true and correct to the best of my knowledge.

\_\_\_\_\_  
Applicant

8/24/11  
Date

Section 2. Existing (pre-alteration) Lake Bottom Conditions

- A. Total acreage of lake bottom to be disturbed by project: acres: 8.31 acres
- B. Current average shoreline slope (percent of grade): 50 %
- C. For projects larger than 10,000 cubic yards, attach a scale drawing (1" = 100') prepared by a licensed engineer showing the following features as they currently exist over the project area and at least 500' on either side of the project:
  - (1) High water line of Big Bear Lake
  - (2) Lot lines of abutting property above the high water line
  - (3) Land contours for elevation 6746' or 6728' at 2' contours
  - (4) Location of willows, trees, rock piles, docks and other significant features

Section 3. Proposed (post-alteration) Lake Bottom Conditions

Type of project proposed (check all that apply):

(Note: If more than one type of project is proposed, only one scale drawing is required showing all relevant information)

- |                                       |                                                     |                                                        |                                      |
|---------------------------------------|-----------------------------------------------------|--------------------------------------------------------|--------------------------------------|
| Dredge Only <input type="checkbox"/>  | Dredge and Fill <input checked="" type="checkbox"/> | Vegetation Removal <input checked="" type="checkbox"/> | Launch Ramp <input type="checkbox"/> |
| (complete Part A)                     | (complete Parts A & B)                              | (complete Part C)                                      | (complete Part D)                    |
| Seawall Only <input type="checkbox"/> | Head Walk <input type="checkbox"/>                  |                                                        |                                      |
| (complete Part E)                     | (complete Part F)                                   |                                                        |                                      |

Other (describe): \_\_\_\_\_

Part A. Dredge Only

- 1. Volume of material to be removed cubic yards 31,750 cubic yards
- 2. Equipment to be used (check all appropriate):
  - Scraper/Loader
  - Dragline
  - Hydraulic DredgeOther (describe): Backhoe, Bulldozer, Dump Truck
- 3. Removed lake bottom material will be placed on:
  - Applicant's property
  - Other\* (specify) \_\_\_\_\_\*Note: A letter from the property owner authorizing placement must accompany application.
- 4. Method of containment if the material is to be placed near the Lake: Berms, Straw Bales, Swales Desiltation Basins including the marina which will remain closed until work is complete.
- 5. Average shoreline slope after alteration (percent grade) Marina 50%, East & West Shoreline 20%



6. Attach a scale drawing (1" = 100') showing the following as they are proposed for the project area extending at least 500' on either side of the project:
- (a) High water line of Big Bear Lake
  - (b) Lot lines of abutting property
  - (c) Proposed land contour after alteration from elevation 6746' to 6728' at 2' contours
  - (d) One or more typical cross-sections of the final slope
  - (e) Location of willows, trees, rock piles, docks, sand beaches and other significant features after alteration

**Part B. Fill Projects**

1. Volume of material to be placed on lake bottom 10,990 cy of soil and 2,637 cy of rock
2. Area of lake bottom currently below elevation 6743.2' that is to be raised above elevation 6743.2' as part of the project (acres): At Marina Entry 0.042 Ac.; Along East Shoreline 0.092 Ac.; and Along West Shoreline 0.584 Ac.
3. Type of material used as fill (check all that apply):
- Lake bottom material       Rock       Sand       Gravel
- Other (specify) \_\_\_\_\_
4. If fill material is other than lake bottom, include a color photograph of proposed fill material.
5. Describe slope protection method. Marina exterior - Rip rap over quarry waste. Marina Interior - quarry Waste; East shoreline - 3:1- 5:1 slope; West shoreline Rip rap over quarry waste and 12:1 slope.
6. Include the following on the scale drawing in Part A:
- (a) area to be filled
  - (b) shore protection details\_

**Part C. Vegetation Removal**

1. Describe the number and species of vegetation to be removed: Marina - 1 aquatic bed with Eurasian watermilfoil (*Myriophyllum spicatum*), coontail (*Ceratophyllum demersum*), water knotweed (*Polygonum amphibium*) American waterweed, and sago pondweed. East shoreline - 1 aquatic bed, 2 willow bushes *salix*.
2. Attach a drawing showing the current location of all vegetation to be removed.

**Part D. Launch Ramp Construction**

1. Type of Material to be used \_\_\_\_\_
2. Describe how unauthorized launching will be controlled
3. Attach a scale drawing (1" = 100') showing the location and size of the proposed launch ramp\_

**Part E. Seawall Installation**

1. Attach a scale drawing (1" = 100') showing the location and details of seawall.

**Part F. Headwalk Installation (see resolution No.2000-09)**

1. Attach a plot plan showing dimensions and location of head walk. Block 25

**Assessor's Parcel Numbers (APN) of property adjacent to project:**

**0304-082-01**

**Hazewinkel, Willia C.  
880 Canyon Rd.  
Fawnskin, CA 92333**

**0304-082-23**

**Branson, Flora J.  
39511 N. Shore Dr.  
Fawnskin, CA 92333**

**0304-082-16, 19, 22**

**Marina Point Dev. Assoc.  
P.O. Box 577  
Del Mar, CA 92014**

**0304-205-12; 13; 14**

**North Shore Cabins  
703 N. Anaheim Blvd. Ste. C  
Anaheim, CA 92805**

**0304-082-04; 0304-091-13**

**RCK Properties Inc.  
P.O. Box 1287  
Northbrook, IL 60065**

**0304-204-03**

**Berlin, Richard H.  
9655 Green Verdugo Dr.  
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## PROJECT DESCRIPTION

The entire shoreline and marina jetties of the Marina Point property are part of a 4.5-acre historic landfill constructed in the late 1960s that created the marina. At that time, the lake bottom surrounding the landfill and in the marina were disturbed by the dredge and fills operations. This work included rip rap protection along all of the shoreline and both sides of the jetty slopes.

The current project plans propose to complete the shore-zone improvements in substantial conformance with BBMWD's 1991 project approval and 1993 Shorezone Alteration Permit. The remaining dredging work is limited to: (i) removal of silt within the marina; (ii) 200 linear feet of the partially dredged lake bottom along the west shoreline to connect the existing dredged areas to improve lake circulation for water quality and boating safety during lower lake levels and; (iii) repair of the east shoreline around the Caltrans drainage pipe. Upon completion of the dredging and repair work, all of the shoreline will be protected with rock or slopes will be graded flatter than 3:1.

The attached plans dated 8/19/11 depicts the following items of work for which the application seeks authorization:

- Complete the shoreline protection along the east side of the Marina Point Property by undertaking the following actions: (i) install a 190 foot temporary 15-foot wide haul road along the top of the proposed slopes on the east side of the drainage as depicted on Sheet 1 of 6, which is to be removed upon completion of the work; (ii) replace and extend the existing undersized 24" Caltrans pipe with a 48" pipe; (iii) Replace the temporary quarry waste and check dam placed in February 2005 with a rip rap energy dissipator at the 48" pipe outlet; (iv) repair the existing erosion on the west and east bank of the drainage leading to the Big Bear Lake by grading a variable 2:1 to 5:1 slope along the property line. This work would dredge 640 cubic yards of silt material and require 2,300 cubic yards of fill to repair the slopes. This work will impact 1.05 acres below the ordinary high water mark (OHWM) of Big Bear Lake that were previously impacted under the ACOE 2005 RGP.
- Dredge the silt material from the inside of the existing marina to a depth of 6725 MSL with bottom dimensions of 260' by 400'. This dredge would remove approximately 22,765 cubic yard silt material. The 4,925 cubic yards of material previously used to temporarily close the south side of the marina for use as a temporary desiltation basin during the ACOE 2003 ICMO will be removed when all other items of work are completed to reopen the marina to Big Bear Lake. This work includes removal of the material placed at the marina opening jetties and placing 3,270 cubic yards of fill below the OHWM by the marina opening to re-protect the jetty exteriors. All four sides of the inside of the marina jetty are to be finished with 2:1 slopes. The slopes on the inside of the marina are to be re-protected from erosion by replacing 2,630 cubic yards of quarry waste (8" minus) rock on all slopes and 910 cubic yards of rip rap at the south entrance. This repair and maintenance work will impact a total of 4.80 acres below the OHWM of Big Bear Lake. This includes 2.32 acres of

previously impacted area and 2.48 acres of new impacts below the OHWM of Big Bear Lake since the original creation of the landfill and marina.

- Complete the balance of the re-armoring of 350 linear feet along the east side of the east jetty with a combination of two feet of rip rap (12-inch-plus) over one foot of quarry waste (8" minus). The work consist of the repair of current erosion and placement of approximately 830 cubic yards of rip rap and quarry waste from the top of the existing rip rap to the top of the slopes at elevation 6744.5+/- MSL. This work will impact 0.26 acres of previously impacted area below the OHWM of Big Bear Lake.