
ILA CONCERNS:
GROWTH VS WATER RESOURCES IN THE JUNE LAKE LOOP
June Lake Advocates
July 2006

AGENDA

1. WATER CONCERNS
2. DOCUMENTED VISION STATEMENTS
3. REGULATORY REQUIREMENTS
4. STANFORD LAW CLINIC WATER STUDY REQUIREMENTS
5. DISCONCERTING STATEMENTS
6. WATER USAGE ESTIMATES
7. GROUND WATER SUPPLY
8. RECOMMENDATIONS
    1. REFERENCES

WATER CONCERNS

- FUTURE WATER DEMAND ESTIMATES VARY SIGNIFICANTLY
- BUILDOUT POPULATION INCREASED BY 2,198 PEOPLE AND WATER DEMAND ESTIMATES TO SUPPORT BUILDOUT DECREASED
- VARIATIONS IN WATER DEMAND CALCUATION METHODOLOGY
- NUMEROUS DISCLAIMERS DOCUMENTED BY EXPERTS

DOCUMENTED VISION STATEMENTS

"Planning for a resort community like June Lake requires balancing the needs of residents against those of visitors. The Loop's scenic beauty and numerous recreation opportunities are it's primary attraction for visitors, while the small-town and mountain lifestyle are the attraction for seasonal and permanent residents.
(continued on next slide)

DOCUMENTED VISION STATEMENTS (cont)

Preserving the existing natural environment and the ambience it creates, while accommodating additional development is of primary concern.” (1)

DOCUMENTED VISION STATEMENTS (cont)

"The goals and objectives of the updated June Lake area Plan inherently minimize potential environmental impact by limiting development. June Lake citizens realize that a drastic increase in growth would ruin the Loop's existing character and appeal to visitors." (2)

DOCUMENTED VISION STATEMENTS (cont)

Balance needs of permanent residents, seasonal residents, second home owners, visitors and business owners.

"The proposed project would have a number of significant mitigatible and unmitigatible environmental effects."

Significant:" Significant effect on the environmental" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, except economic or social changes by themselves." (2)

REGULATORY REQUIREMENTS

"The California Environmental Quality Act (CEQA) requires lead agencies prepare an EIR in cases where a project may have a significant effect on the environment." (3)

REGULATORY REQUIREMENTS (cont)

- “Under SB901, the assessment will determine if the water providers available water supplies are capable of meeting the development’s needs during single-dry and multiple-dry water years as described in the Urban Water Management Plan 20 year projections.” (5)
- “The local Planning Agency may deny the development if the assessment shows that insufficient water supplies are available.” (5)

REGULATORY REQUIREMENTS (cont)

- SB221 - “Sufficient, reliable water supply” substantial evidence ...test to support verification of its findings.” (6)
- “Describe the reliability of the water supply and vulnerability to seasonal or climate shortage...” (7)

REGULATORY REQUIREMENTS (cont)

- “The length and severity of drought in California cannot be predicted with any accuracy.” (1)
- ”Furthermore, California’s overall water delivery system has become less reliable over the last 20 years because demand for water has continued to grow while new supplies have not been developed...” (5)
- ”...impose water rationing...” (7)
- ”The identification and development of water supplies needed during multiple-year droughts ..” (8)

REGULATORY REQUIREMENTS (cont)

- Lahontan Regional Water Quality Control Board Regulations governing water contaminants.
- Federal Water Project Recreation Act, comparable to the Davis-Delwig Act, of 1965. Federal Energy Regulatory Commission license to operate a hydroelectric facility usually includes an obligation to construct specific recreation facilities to provide for anticipated demand. (27)
- Department of Fish & Game Regulations

STANFORD LAW CLINIC WATER STUDY REQUIREMENTS

- COPY IN HAND OUT

DISCONCERTING STATEMENTS

"Local and Regional Water Resources – Supplying water to the level of development allowed under the Plan could impact water resources in and around the June Lake Loop, especially under drought conditions." (4)

"Reference: Water Resources –Potential Impact 6, Poor water circulation in Gull Lake and contaminants caused by development adjacent to Gull Lake are degrading the lake's fish habitat. Additional pollutant loads could lead to algae blooms and fish die-offs from oxygen starvation." (10)

DISCONCERTING STATEMENTS (cont)

- Reference: SB610, 94, 3, Section 1, (a), [7] "With increasing frequency, California's water agencies are required to impose water rationing on their residential and business customers during this state's frequent and severe periods of drought." [8]

DISCONCERTING STATEMENTS (cont)

- Reference: JLMEA: Water diversions for Export and Hydroelectric Power Generation. “ ..water diversions for domestic use and energy production have caused the greatest impacts on water bodies.” “ ...Public Utility District and the June Mountain Ski Area are the principal licensed diverters of water for domestic consumption. These diversions cause stream flow reductions and lake level fluctuations in surface waters tributary to Rush Creek.” (14)

DISCONCERTING STATEMENTS (cont)

- Reference JLEIR: Water Quality: ”All alternatives that call for additional development pose the risk of degrading the Loop’s water quality and negatively affecting the Loop’s fishing opportunities. … Larger areas of impervious surfaces cause higher levels of stormwater and snowmelt runoff and could cause erosion and sedimentation of water bodies. Increased sedimentation of water bodies could also be caused by higher usage of sensitive the creek and lakeshore areas by people attracted by new development. (15)

DISCONCERTING STATEMENTS (cont)

- Reference MEA: Energy Sources: "The generation of additional energy to correspond with community growth could adversely affect the Loop's environment." "...while additional hydroelectric generation facilities could have detrimental effects on streams and lakes." (17)

DISCONCERTING STATEMENTS (cont)

- Reference MEA: Energy Sources: "Resource agencies are concerned that generating additional hydroelectric power could reduce the amount and condition of aquatic and riparian wildlife habitat, scenic quality and water based recreation." (17)
- "Load increases related to June Mountain Ski Area expansion and community growth will necessitate the construction of new electrical distribution and substation facilities in the near future." (20)

DISCONCERTING STATEMENTS (cont)

- Global Warming – World wide concerns

DISCONCERTING STATEMENTS (cont)

- “This amount is inadequate to meet the current demand in Down Canyon....” (29)
- “It is likely that LADWP will file protests against any changes or extensions associated with the junior JLPUD rights as there will be a concern that upstream diversions could increase and affect LADWP’s ability to comply with the requirements of Decision 1631 and Order 98-05. (Mono Lake Settlement).” (30)

DISCONCERTING STATEMENTS (cont)

- "During the low-flow season following dry water years Snow Creek flows appear to be insufficient to meet projected increased demands associated with build-out of the JLPUD Village system (excluding Rodeo Grounds) or development if only the Rodeo Grounds." (32)

DISCONCERTING STATEMENTS (cont)

- “Reliance on increased June lake diversions to offset Snow Creek supply deficits for projected demands will accelerate drops in June lake levels.” (33)

DISCONCERTING STATEMENTS (cont)

- “Flows in Fern Creek, which supplies JLPUD’s Down Canyon System, do not appear to be sufficient during low-flow periods following dry water years to meet existing Down Canyon demands while concurrently complying with State-mandated minimum in-stream flow bypass requirements.,” (34)
- “Sufficient information is not available to quantify water availability...” (34)

DISCONCERTING STATEMENTS (cont)

- “1981 Assessment study, DWR used an annual lake evaporation value of 38” for June Lake….” (35)
- “Total Build-out (existing plus incremental plus Rodeo Grounds)-Snow Creek is insufficient for all months.” (36)
- “Existing plus incremental build-out only (without Rodeo Grounds)-Snow Creek supply is sufficient for November only.” (27)

DISCONCERTING STATEMENTS (cont)

- "Excessive draw downs of the level of June Lake could detract from the Lakes aesthetic appeal." (28)
- "The Down Canyon System treatment facilities are not adequate to meet build out demands. An increase of approximately 288,000 *gpd* (200 *gpm*) is proposed." (16)

DISCONCERTING STATEMENTS (cont)

- “The Village System is unable to meet fire flow demands with the present system and is therefore, unable to meet fire flow demands at build out. It is recommended large diameter pipes replace the small diameter pipes.” (16)

WATER USAGE ESTIMATES

1. WSA requires standard procedures of estimating water demand at a per capita (per person) per day rate. (18)
   - Mammoth Urban Water Plan (2004) uses figures for residents at 200 gallons per day. (26)
   - State Wide estimates range about 220 *gpd*. (13)
   - Pacific Institute, 2003, provides a statewide figure of 185 *gpd* for municipalities. (13)

WATER USAGE ESTIMATES (cont)

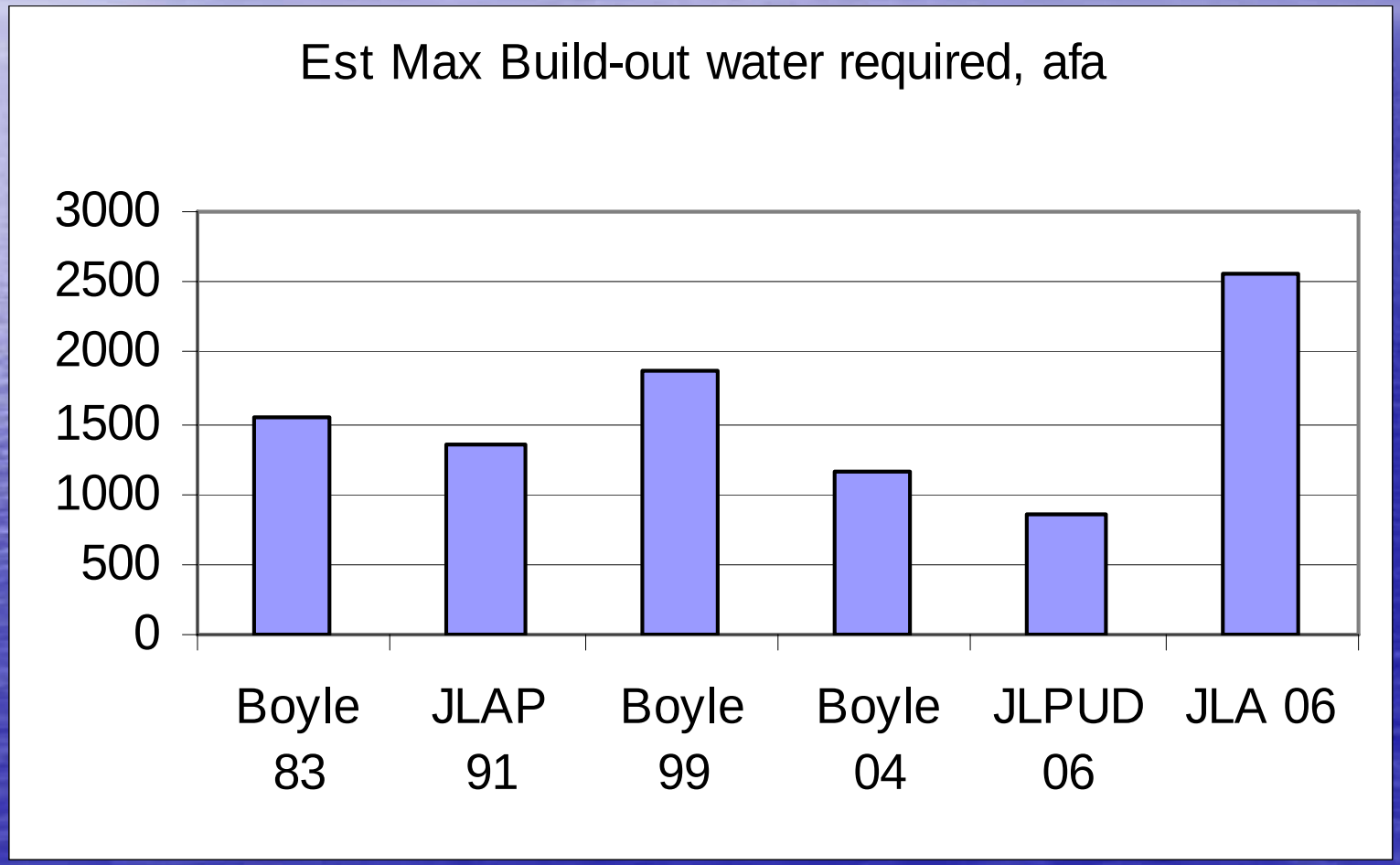
- Mono Lake Basin Water Right Decision #1631, 1994. At the time the EIR was drafted, “Daily water was about 179 *gpd* per person which is moderately low in comparison to other cities in California and elsewhere in the County.” (24)

- “This translates to an annual use of about 945 *gpd* per capita.” Down Canyon- (25)

BUILD-OUT REQUIREMENTS

Year	Study	Highland/ Rodeo Grnd	Permanent Residents	Peak Pop@ Buildout	GPD per person	Est. Ave Build out	Est Max Build out
1974	DWR	No	542	10,500			
1981	SWR	No	686	10,500		597 *afa*	
1983	Boyle	No	686	10,500		774 *afa*	1,548 *afa*
1991	JLAP	Yes	580	12,698		670 *afa*	1,340 *afa*
1999	Boyle	Yes	580	12,698		643 *afa*	1,859 *afa*
2004	Boyle	Yes/900	613	12,698		545 *afa*	1,160 *afa*
2006	ECO	Yes/499		12,698		394 *afa*	
2006	JLPUD	Yes/499		12,698		431 *afa*	859 *afa*
2006	JLA	Yes/499	613	12,689	179 *gpd*		2,546 *afa*

MAX BUILD-OUT WATER REQUIRED



GROUND WATER SUPPLY

- “The area between Gull and June Lake was not covered because an earlier study (5) had shown unconfined conditions and ground water in continuity with the lakes. Extracting ground water here would be a direct drain on the lakes.” (19)
- “Potential Impact 3 – Increased water diversions for local water consumption could impact streamside riparian habitat and, if groundwater sources are developed, lower water tables and impact the overlying vegetation.” (9)

GROUND WATER SUPPLY (cont)

- “Although the existing developed water sources will provide water for the community for many years into the future, new water sources will be needed to provide for the anticipated future build-out. Developing new water sources will require strict compliance with existing environmental laws which are designed to prevent or lessen impact of new water projects.” (9)

GROUND WATER SUPPLY (cont)

- “Data on June Lake ground water resources has not been adequately collected by the local water agencies prior to developing ground water sources, additional information on the quantity of ground water available and on environmental impacts would need to be collected. Future ground water development projects would be subject to existing environmental laws.” (9)

- “Impacts of disturbing...vegetation...will result in increases in surface runoff...and carry contaminants...to deteriorate water quality and speed aging process of water bodies.” (23)

GROUND WATER SUPPLY (cont)

- “Constructing impermeable surface over ground water recharge zones...could risk contamination...and may diminish...surface water of the June Lake Loop.” (23)
- “Because the ground water is actually in a transient state moving downstream as subsurface flow or surfacing in the creek channel, the subsurface flows would have to be estimated to determine the actual ground water supply.” (21)

GROUND WATER SUPPLY (cont)

- “Specifies that where a water supply for a proposed subdivision includes groundwater, that the public water system shall evaluate, based on substantial evidence, the extent to which it or the landowner has the right to extract the additional ground water needed to supply the proposed subdivision.” (22)

RECOMMENDATIONS

- WORK TOGETHER TO AGREE ON THE PARAMETERS AND METHODS OF ANALYSIS FOR DETERMINING FUTURE WATER DEMAND ESTIMATES
- VERIFY PARAMETERS WITH ACTUAL DATA
- REITERATE ANALYSIS USING NORMAL, DRY AND MULTIPLE DRY SEASONAL DATA
- SCE EXPLAIN NEW POWER PLANT
- ESTABLISH ACCEPTABLE JUNE LAKE AND STREAM FLOW THRESHOLDS
- POTENTIAL IMPACT ON ECO SYSTEMS BRIEFING
- ADDRESS DISCLAIMERS WITH SOLUTIONS

REFERENCES

1. 1991 June Lake Area Plan EIR, page I-10
2. 1991 June Lake Area Plan EIR, page vii
3. 1991 June Lake Area Plan EIR, page 1-1
4. 1991 June Lake Area Plan EIR, page xii
5. SB221, page 3
6. SB221, page 4, (88), Ch 642
7. SB610, page 5, (94), Ch 643, par C
8. SB610, page 3, (94), Ch 643, Section1,(7)
9. EIA, page IV-2
10. EIA, page IV-5
11. EIA, page IV-21
12. EIA, page IV-27
13. Comments, HYDROLOGIST S. BURAK
14. MEA, page 138, par7
15. EIA, page IV-56
16. JLPUD Executive Summary June 2006, Recommended Improvements
17. MEA, page 117, par2 & page 120, par 1
18. NATIONAL HANDBOOK OF RECOMMENDED METHODS FOR WATER DATA
19. 1981 Dept of Water Res., Water Resource Assessment Study, page 30
20. Mea, page 117

REFERENCES (cont)

21. MEA, page 108, par 7
22. SB221, page 5, par 12
23. EIA, page 35, par 5
24. Mono Lake Basin Water Rights Decision #1631, 1994, page 160
25. Communication from M. Pohlman, JLPUD, August 23,2005. Wagner & Bonsignore, Tech Memo No.3, page 6, par 1
26. Hydrologist, S. Burak
27. Wagner & Bonsignore, Tech Memo No.4, page 15
28. Wagner & Bonsignore, Tech Memo No.4, page 17
29. Wagner & Bonsignore, Tech Memo No.3, page 6, par 2
30. Wagner & Bonsignore, Tech Memo No.3, page 28
31. Wagner & Bonsignore, Tech Memo No.4, page 2
32. Wagner & Bonsignore, Tech Memo No.4, page 3
33. Wagner & Bonsignore, Tech Memo No.4, page 3
34. Wagner & Bonsignore, Tech Memo No.4, page 4
35. Wagner & Bonsignore, Tech Memo No.4, page 11
36. Wagner & Bonsignore, Tech Memo No.4, page 16
37. Wagner & Bonsignore, Tech Memo No.4, page 17