

KRONICK
MOSKOVITZ
TIEDEMANN
& GIRARD
A PROFESSIONAL CORPORATION

THOMAS W. BIRMINGHAM

May 15, 1997

HAND DELIVERED

The Honorable John Caffrey, Chairman
State Water Resources Control Board
901 P Street
Sacramento, CA 95814

Re: Hearing on Mono Basin Stream and Waterfowl
Restoration Plans

Dear Chairman Caffrey:

Enclosed is the original of the Mono Lake Settlement Agreement, which has been signed by California Trout, Inc., the California State Lands Commission, Richard Ridenhour and California Department of Fish and Game. I am informed by Bruce Dodge that he previously sent to you the agreement signed by the Mono Lake Committee and National Audubon Society. I am also informed that the agreement is awaiting signature by the appropriate official of the City of Los Angeles. Upon receipt an original signature page from the City, it will be forwarded to you. Enclosed is a copy of records from the City Council of the City of Los Angeles indicating that the agreement was formally approved on April 23, 1997.

The signature from the California Department of Parks and Recreation is a photocopy, and upon receipt of the original, it will be forwarded to you. We anticipate receiving a signed agreement from the Trust for Public Lands. We do not anticipate receiving a signed agreement from the Bureau of Land Management or Acularius Ranch.

If you have any questions concerning this matter, please contact me.

Very truly yours,

KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
A Professional Corporation



THOMAS W. BIRMINGHAM
Attorneys for the Department of Water &
Power of the City of Los Angeles

TWB:djc

297903.1

cc: Attached list

ATTORNEYS AT LAW

400 CAPITOL MALL, 27TH FLOOR SACRAMENTO, CALIFORNIA 95814-4417 TELEPHONE (916) 321-4500 FAX (916) 321-4555
135 MAIN STREET, SUITE 1300 SAN FRANCISCO, CALIFORNIA 94105-1812 TELEPHONE (415) 777-2333 FAX (415) 777-5746

<http://www.kmtg.com>

MONO LAKE
SETTLEMENT AGREEMENT

WHEREAS, Decision 1631 ("D1631") by the State Water Resources Control Board ("SWRCB") requires the Department of Water and Power of the City of Los Angeles ("DWP") to prepare a Stream and Stream Channel Restoration Plan, a Waterfowl Habitat Restoration Plan, and a Grant Lake Operation Management Plan ("GLOMP");

WHEREAS, DWP, in response to D1631 requirements noted above, submitted draft plans dated February 29, 1996, and a (revised) Plan for Monitoring the Recovery of the Mono Basin Streams (January 1997);

WHEREAS, certain parties challenged the adequacy of DWP's draft plans; and

WHEREAS, the parties to this Settlement Agreement desire to resolve their differences as set out in this Agreement and will request that the SWRCB adopt an order directing DWP to implement the Stream and Stream Channel Restoration Plan, Waterfowl Habitat Restoration Plan and Grant Lake Operation Management Plan as modified by this Settlement Agreement;

THE PARTIES HERETO AGREE AS FOLLOWS:

I. Stream Restoration

DWP will implement its Stream and Stream Channel Restoration Plan (February 29, 1996), with the following changes:

A. Channel Maintenance Flows ("CMFs")

1. Until Mono Lake reaches its transition level of 6392 feet, CMFs in Rush Creek shall be as set out in the February 13, 1996, memorandum by the ad hoc flow subcommittee (copy attached as Exhibit "A") except in Dry Years. There shall be no CMF in a Dry Year. Provided, however, DWP may reduce the required CMF in Dry/Normal and Normal Years to the extent necessary to maintain the exports allowed DWP by D1631. In Dry/Normal and Normal Years, pursuant to GLOMP, DWP will have a target Grant Lake storage of 30,000 - 35,000 acre-feet at the beginning and end of the runoff year and will not be required to release CMFs that will draw Grant Lake storage below 11,500 acre-feet.

2. After Mono Lake reaches its transition level of 6392 feet, CMFs in all four creeks shall be as set out in Exhibit A in Extreme Wet Years, Wet Years, and

Wet/Normal Years (as defined in Exhibit A). In all other years, CMFs in all four creeks will be as set out in GLOMP. All flows in this paragraph are subject to change by the SWRCB based on results of the monitoring program. Flows set out in this paragraph will cease upon a determination by the SWRCB that the stream restoration program is complete; provided, however, that upon completion of the stream restoration program, it may be necessary to modify the channel maintenance and flushing flows established by D1631.

3. All CMFs for each year type are minimums. DWP will in all years attempt to maximize CMFs through coordination with Southern California Edison ("SCE"), and may include encouraging SCE to coordinate their spills and releases at the same time Grant Lake is spilling; granting SCE waivers, as appropriate, from the 5% storage rule; developing annual operating plans only after consultation with SCE; encouraging SCE to spill Tioga at the same time that Lee Vining Creek flows are peaking. In Wet and Extreme Years, DWP will attempt to maximize CMFs in Rush Creek through operation of Grant Lake so as to maximize the probability and magnitude of spills with a target of 40,000 acre-feet storage for April 1. If DWP is unable to achieve this target, it will provide a written explanation to the parties to this Settlement Agreement by May 1.

4. DWP will not irrigate from Parker and Walker Creeks during CMFs in Rush Creek. Provided DWP can anticipate peak flows in Walker and Parker Creeks,

it will not irrigate from Parker Creek during CMFs in Parker Creek or from Walker Creek during CMFs in Walker Creek. DWP will use its best efforts to anticipate peak flows in Parker and Walker Creeks.

B. Stream monitoring

DWP will implement its January 1997 stream monitoring program, with the changes set out herein:

1. Monitoring Team. The stream monitoring program will be funded by DWP and under the direction of Bill Trush, Chris Hunter and such other independent scientists as the parties may agree to. If the need to replace a member of the monitoring team arises, the existing monitoring team will make a recommendation and, absent an objection within 30 days from a party to this Settlement Agreement, the person recommended will be added to the monitoring team.

2. In addition to duties set out elsewhere in this Settlement Agreement, the monitoring team shall oversee the implementation of the monitoring program and

a. Evaluate and make recommendations on, based on the results of the monitoring program, the CMFs necessary (including magnitude, duration, and frequency) for the restoration of Rush Creek and the need for a Grant Lake bypass to achieve reliably those CMFs. (For purposes of this paragraph, Rush Creek is defined as the stream below its confluence with the DWP return ditch.) This evaluation will take place after two data gathering cycles, but no less than eight years or more than ten years after the monitoring program begins. DWP will implement the recommendation of the monitoring team unless it determines that the recommendation is not feasible (capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and a technological factors). DWP will have 120 days after receiving a recommendation to make this determination. If, after that 120 day period, any party to this Settlement Agreement disagrees with DWP's determination, the SWRCB will be asked to resolve the matter.

b. Evaluate the effect of augmentation¹ on Lee Vining Creek and its reliability in attaining specified CMFs in Rush Creek and recommend a Grant Lake outlet upon a finding of material adverse impact or unreliability. DWP will implement the recommendation of the monitoring

¹ As set out by DWP, augmentation here refers to the movement of up to a maximum of 150 cfs of Lee Vining Creek water into Rush Creek in order to attain desired CMFs in Rush Creek.

team unless it determines that the recommendation is not feasible (capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and a technological factors). DWP will have 120 days after receiving a recommendation to make this determination. If, after that 120 day period, any party to this Settlement Agreement disagrees with DWP's determination, the SWRCB will be asked to resolve the matter.

c. From time to time, and not less than annually, submit a written report to DWP evaluating the results of the monitoring program and, based on that evaluation, recommending changes in the stream restoration program, including the monitoring program. Among other things, this report will include a quantitative comparison, in chart or comparable form, of the termination criteria and the corresponding conditions measured in each stream that year. It will also discuss the progress, since the start of the monitoring program, towards achievement of those criteria on each stream;

d. Make a recommendation to the SWRCB that the stream restoration program is complete and make a recommendation on actions to preserve and protect the streams.

3. Yearly Reports. On or about April of each year hereafter, DWP will submit to the SWRCB an annual report on the monitoring program. This report will set forth the monitoring team's evaluation of results and its recommendations for any changes in the restoration program and DWP's position on such evaluation and recommendations.

4. Termination Criteria. Monitoring will be terminated on the Board's approval of DWP's report that all criteria set forth below, as hereafter amended, have been met for each stream subject to D1631.

a. The termination criteria are:

- (1) acreage of riparian vegetation (including mature trees of sufficient diameter, height, and location to deposit large woody debris in streams);
- (2) length of main channel;
- (3) channel gradient;
- (4) channel sinuosity;
- (5) channel confinement;
- (6) variation of longitudinal thalweg elevation; and
- (7) structure of fish population.

b. These criteria will be quantified as follows:

(1) The criteria will describe the qualities which existed in the streams subject to D1631 before DWP caused degradation to these streams. For the purpose of this Settlement Agreement, those qualities are the "pre-project conditions."

(2) Each of these criteria will be stated separately for each stream.

(3) The monitoring program will evaluate progress towards achievement of each of these criteria. Where an existing condition precludes the restoration of a pre-project condition, the parties agree that a corresponding criterion which is functionally equivalent in fishery benefits will be established.

(4) The monitoring team may, from time to time, reevaluate and if appropriate, recommend changes in the quantified forms of these criteria, on the basis of improved understanding of how to evaluate progress in restoring these streams.

c. The criteria will be quantified on the following schedule.

(1) The parties to this Settlement Agreement will submit to the SWRCB quantified forms of criteria (a) (1) - (4) and (7) by April 15, 1997. That submittal will constitute an amendment to this Settlement Agreement. If the parties do not agree to quantified criteria by that date, or if the parties submit mutually agreeable criteria but the SWRCB thereafter materially amends them, any party may elect to withdraw from this Settlement Agreement, after notice to the other parties and good faith efforts to resolve the concerns.

(2) The monitoring team will recommend quantified forms of criteria (a) (5) - (6) within one year of the SWRCB's adoption of this Settlement Agreement as an order.

C. Rush Creek Return Ditch

DWP will upgrade as per its plan, without the long term loss of fish habitat in the ditch, with the agreement that the cost of doing so will not be advanced in the future as a reason for not constructing a Grant Lake bypass.

D. Large Woody Debris

DWP will implement its plan. Thereafter, DWP will add large woody debris to Rush and Lee Vining Creeks on an opportunistic basis, based on the recommendations of the monitoring team.

E. Reopening Channels

If channels reopened through restoration efforts become closed, the monitoring team shall decide on a case by case basis whether or not to again reopen them, and DWP will implement the monitoring team's decisions.

F. Sediment Bypass

DWP will hire experts agreeable to the parties to this Settlement Agreement to analyze and design sediment bypass systems at Walker, Parker, and Lee Vining diversions that pass sediments in a natural process on a year round basis. The parties will ask these experts to evaluate fish passage and the rewatering of Parker and Walker Creek distributaries in their analysis and design. The analysis and design shall be done in two phases, beginning with conceptual analysis. The conceptual analysis and design will include the experts' recommendation for action and will be received by March 1, 1998. This deadline may be extended at the request of the experts chosen, but in no event, shall the deadline extended beyond March 1, 1999. After receipt of the analysis and design, DWP will have 120 days to decide which sediment passage facilities it will construct. If,

after that 120 day period, any party to this Settlement Agreement disagrees with DWP's position, the SWRCB will be asked to resolve sediment passage.

G. Fish Passage.

Except as set out *supra*, under Sediment Bypass, the parties agree that the Stream and Stream Channel Restoration Plan need not include fish passage. LADWP will comply with applicable laws regarding fish passage.

II. GLOMP

DWP will implement its GLOMP (February 29, 1996), with the following changes:

A. In those years when DWP allows flows down the four diverted streams for "lake level" purposes, DWP to the extent practicable will do so in a manner as to mimic the impaired natural hydrograph, provided, however, nothing in this paragraph shall affect the minimum flows set out in D1631, the CMFs set out in this Settlement Agreement, or DWP's attempt to maximize CMFs as set out in the Settlement Agreement.

B. The parties recognize that the Department of Fish and Game has concerns that base flows in Rush Creek in excess of 70 cfs during the period October through March may cause injury to the Rush Creek fishery. DWP will make reasonable efforts to reduce flows during this period in recognition of those concerns.

C. All existing data collection facilities for flows will be retrofitted so as to make data available on a same day basis on a web site.

III. Waterfowl Restoration

A. DWP will carry out the following activities from its February 29, 1996, waterfowl plan.

1. Reopening of Rush Creek channels;
2. Upon the recommendation of the Mono Basin Waterfowl Habitat Restoration Foundation ("MBWHRF"), or other appropriate entity, use its Mill Creek water rights for waterfowl restoration pursuant to Water Code Section 1243 and will petition the SWRCB for a change in purpose of use pursuant to Section 1707.
3. Continue its limnological monitoring plan from the present until ten years after Mono Lake reaches its transition level of 6392 feet. The results will be made available to the MBWHRF (discussed infra) on a timely basis.

B. In satisfaction of its waterfowl habitat restoration obligations under D1631, DWP will pay \$3.6 million for waterfowl habitat restoration and monitoring and any environmental

review associated therewith. Within thirty days of the entry of the SWRCB order approving this Settlement Agreement, DWP will pay these monies into an escrow account and will thereafter authorize release of these monies from the account to the MBWHRF or other appropriate legal entity, which entity is described in the document (filed with the SWRCB simultaneously with this Settlement Agreement) entitled "Mono Basin Waterfowl Habitat Restoration Foundation Conceptual Agreement," upon notice satisfactory to DWP that the entity has been formed and is ready to discharge its responsibilities under the Settlement Agreement.

C. In any environmental review of waterfowl activities proposed by the MBWHRF, DWP shall not be the lead agency. DWP, to the extent required by law, will act as a Cooperating or Responsible Agency.

D. DWP will assign or abandon its SWRCB application 30565 as requested by the MBWHRF.

E. In light of DWP's commitment to this process and the waterfowl restoration program's goals, DWP will make its land in the north end of the Mono Basin reasonably available for restoration or monitoring activities sponsored by the MBWHRF. DWP will, upon request by the MBWHRF, consider making other lands similarly available.

F. The MBWHRF will make available to DWP all data and other information collected from any monitoring activities.

IV. Miscellaneous

A. The parties agree that this is a compromise resulting from a unique set of facts. As such, the parties further agree that this Settlement Agreement should not be used as precedent against any of these parties in future environmental controversies.

B. After the SWRCB order implementing this Settlement Agreement becomes final (i.e., no longer subject to judicial review), the parties to this agreement who brought actions now coordinated in El Dorado Superior Court will dismiss those actions, provided, however, that the El Dorado Superior Court will retain jurisdiction to resolve issues of attorneys' fees and related matters.

C. This Settlement Agreement may be signed in counterpart.

D. The parties commit to good faith efforts to resolve disputes arising under this Settlement Agreement. Any party wishing to resolve a dispute will give written notice

to all other parties identifying the problem and requesting a meeting to resolve it. The parties will have sixty days in which to resolve the issue. Thereafter, any party may seek resolution of the noticed issue(s) by the SWRCB.

E. No party to this Settlement Agreement waives or yields to any other party to the Settlement Agreement any regulatory or legal authority or duty that is necessary to the proper exercise of that party's discretion or otherwise imposed by law. Nothing in this Settlement Agreement shall be construed to prevent the state or federal agencies signatory hereto from fully exercising whatever jurisdiction and authorities they may individually or collectively possess. Except as is expressly provided by terms of this Settlement Agreement, the Settlement Agreement shall not be construed as a covenant by the state or federal agencies not to sue or not to utilize any other legal or administrative procedures which may be available to them, provided that nothing in this Settlement Agreement shall be construed as a waiver by any party of any *res judicata* or collateral estoppel effect of D1631.

F. The parties agree to submit this Settlement Agreement to the SWRCB for adoption. If the SWRCB adopts this Settlement Agreement without material amendment, the parties agree not to seek judicial review of such order. If the SWRCB materially amends this Settlement Agreement in its order, any party may elect to withdraw from the Settlement Agreement, after written notice to the other parties and good faith efforts to resolve the

concerns related to the material amendment. A withdrawing party retains whatever legal rights it may have to seek judicial review.

Los Angeles Department of Water and Power

Robert C. Hight - 5-13-97

California State Lands Commission

California Department of Parks and Recreation

California Department of Fish and Game

United States Forest Service

United States Bureau of Land Management

National Audubon Society

The Mono Lake Committee

California Trout, Inc.

Richard Ridenhour

concerns related to the material amendment. A withdrawing party retains whatever legal rights it may have to seek judicial review.

Los Angeles Department of Water and Power

California State Lands Commission

California Department of Parks and Recreation

Gregory L. Kessel, DIRECTOR
California Department of Fish and Game

United States Forest Service

United States Bureau of Land Management

National Audubon Society

The Mono Lake Committee

California Trout, Inc.

Richard Ridenhour

concerns related to the material amendment. A withdrawing party retains whatever legal rights it may have to seek judicial review.

Los Angeles Department of Water and Power

California State Lands Commission

California Department of Parks and Recreation

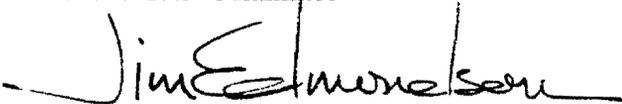
California Department of Fish and Game

United States Forest Service

United States Bureau of Land Management

National Audubon Society

The Mono Lake Committee


California Trout, Inc.

Richard Ridenhour

concerns related to the material amendment. A withdrawing party retains whatever legal rights it may have to seek judicial review.

Los Angeles Department of Water and Power

California State Lands Commission

California Department of Parks and Recreation

California Department of Fish and Game

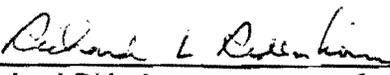
United States Forest Service

United States Bureau of Land Management

National Audubon Society

The Mono Lake Committee

California Trout, Inc.


Richard Ridenhour 5 May 97

concerns related to the material amendment. A withdrawing party retains whatever legal rights it may have to seek judicial review.

Los Angeles Department of Water and Power

California State Lands Commission

Donald W. Murphy
California Department of Parks and Recreation

California Department of Fish and Game

United States Forest Service

United States Bureau of Land Management

National Audubon Society

The Mono Lake Committee

California Trout, Inc.

Richard Ridenhour

Richard L. Ridenhour
2736 Sunny Grove Avenue
McKinleyville, CA 95519-9226
(707) 839-3300

13 February 1996

To: Mr. Peter Kavounas

From: The ad hoc Flow Subcommittee *mm*

Re: PROPOSED FLOW SCHEDULES FOR RESTORATION AND MAINTENANCE OF THE
MONO BASIN STREAMS

As outlined in your memorandum to Mr. Hunter, Dr. Ridenhour, and Dr. Trush dated 12 January 1996, an ad hoc Subcommittee was established to reconsider the flow schedules for the restoration and maintenance of the Mono Basin streams (Rush, Lee Vining, Walker, and Parker creeks). The Subcommittee, comprised of Mr. Chris Hunter, Dr. Bill Platts, Dr. Richard Ridenhour, Mr. Gary Smith, and Dr. Bill Trush, has participated in 4 conference calls to develop a recommended flow schedule. Mr. David Allen and Mr. Peter Vorster participated in the last half of the second call and subsequent calls.

We wish to thank Mr. Allen, in particular, for his prompt preparation of GLOM runs that illustrated the characteristics of various alternative flow patterns and his identification of the physical capabilities of the various conveyance systems. The background knowledge of, and analyses by, Mr. Vorster were also very helpful to us.

The Subcommittee concludes and recommends as follows:

1. Stream flows that mimic natural hydrologic patterns should be the primary sources of energy to restore and maintain Rush Creek, Lee Vining Creek, Walker Creek, and Parker Creek and their stream habitats.
2. The stream habitat restoration and maintenance goals and objectives should be in terms of accomplishing and maintaining certain dynamic processes within the streams by the maintenance flow regimes provided in the various runoff years. The runoff year categories identified for the Mono Basin streams are defined by the anticipated percentages of normal runoff as follows:

<u>Runoff-Year Category</u>	<u>Definition</u>	<u>Recurrence¹</u>
Extreme Wet Years	>160% of normal	8%
Wet Years	137-160% of normal	12%
Wet/Normal Years	107-137% of normal	20%
Normal Years	83-107% of normal	20%
Dry/Normal Years	69-83% of normal	20%
Dry Years	<69%	20%

¹ Recurrence based on approximately 50 years of record.

The basic processes include, varying as a function of the timing, magnitude, and duration of the flows, bedload movement including scouring, bank erosion, and deposition, interactions with the stream side, floodplain, and interfluvial vegetation including enhancement of germination, reduction of channel encroachment, and recruitment of large woody debris, and restoration of groundwater levels. These

processes have been more specifically described on pp. 156-158 of the Draft Stream Restoration Plan submitted by the Stream Scientists. (The Mono Basin runoff year categories and the terminology used on pp. 156-158 of the Draft Stream Restoration Plan submitted by the Stream Scientists correspond in terms of the dynamic processes that should occur as follows: Extreme Wet - "Extreme Events", Wet - "Extreme Snowmelt Floods", Wet/Normal - "Typical Snowmelt Floods", Normal - "Thunderstorm Runoff", Dry/Normal - "Winter Baseflows" and Dry - "Post-Snowmelt Baseflows".)

3. The base flows were discussed. It was noted, in particular, that the Dry Year schedule for Rush Creek appears anomalous with higher minimums for the October-March period than for the April-October period. There was also general support of the concept of base flows that varied on a monthly basis. However, there was insufficient time to develop any specific recommendations about base flow schedules. Further consideration should be given to identify suitable base flows.
4. The principal attention was given to the maintenance flows. The recommended maintenance flows, with ramping rates not to exceed 25% up and 15% down as recommended in the Draft Stream Restoration Plan submitted by the Stream Scientists, are as follows:
 - a. Rush Creek - The operations of Southern California Edison that substantially attenuate the peak runoff flows and delay the runoff into Grant Lake Reservoir, the relatively large storage capacity of Grant Lake Reservoir, and the limited capacity to release water from Grant Lake Reservoir combine to make it difficult to provide the flows needed to restore and maintain Rush Creek below Grant Lake Reservoir. These conditions prevent using the natural flow patterns and volumes (either unimpaired or impaired by Southern California Edison operations) to achieve stream restoration and maintenance objectives in Rush Creek. However, water from Grant Lake Reservoir could potentially be used for flow management purposes. It was agreed that the stream maintenance flows recommended by the Stream Scientists in their Draft Stream Restoration Plan were the desirable flows to restore and maintain the stream below Grant Lake Reservoir. Three alternatives for providing desired maintenance flows to Rush Creek downstream of Grant Lake Reservoir were considered:

1. Use the Mono Ditch with its capacity increased to between 350 and 380 cfs and augmented with spills from Grant Lake Reservoir.

Reliance on spills from Grant Lake Reservoir is considered to be too unpredictable, even if the capacity of Mono Ditch were increased to 350-380 cfs, to consider Alternative #1 to be a reliable alternative for providing the flows recommended by the Stream Scientists in their Draft Stream Restoration Plan. Also, unless specific steps are taken to retain habitat complexity elements, increasing the capacity of Mono Ditch would result in loss of fish resources and habitat from this facility.

2. Construction of a new facility to release water from Grant Lake Reservoir directly into Rush Creek immediately below the Dam either independent of, or in coordination with, use of the Mono Ditch.

This, the preferred alternative, would require the capability to release water directly from Grant Lake Reservoir to provide the flows as recommended by the Stream Scientists in their Draft Stream Restoration Plan. This alternative is considered to be the most reliable in terms of providing the volumes, timing, magnitude, and duration of water needed to mimic the natural hydrograph as originally recommended by the Stream Scientists to restore and maintain the stream habitat, including Reach 1. of Rush Creek below Grant Lake Reservoir.

3. Use a combination of the Mono Ditch with its capacity increased to 350-380 cfs augmented by approximately 150 cfs of water diverted from Lee Vining Creek and discharged into Rush Creek from the Sand Trap #5 facility on the Lee Vining Conduit, by Walker and Parker creek flows to augment the flows in the Rush Creek Bottomlands, and by occasional but unpredictable, in terms of frequency and magnitude, spills from Grant Lake Reservoir.

This alternative could provide acceptable stream habitat maintenance flows for Rush Creek below the Narrows but would not provide acceptable restoration and maintenance flows above the Narrows. This alternative would require increasing the capacity of the Mono Ditch and augmentation of Rush Creek water with water from Lee Vining, Walker and Parker creeks. And, as indicated above, increasing the capacity of Mono Ditch would result in the loss of fish resources and habitat unless steps were taken to retain habitat complexity elements. Because Southern California Edison fills its Gem Lake storage reservoir during the first portion of the runoff, the impaired peak flows in Rush Creek normally follow the Lee Vining Creek peak flows by two to three weeks. Therefore, 150 cfs could be diverted from Lee Vining Creek to augment Rush Creek maintenance flows without impairing the peak flows needed for stream habitat maintenance in Lee Vining Creek. If water is diverted from Lee Vining Creek to augment Rush Creek maintenance flows, the diversions should not start less than 7 days after the peak flow in Lee Vining Creek has been attained (the bases for determining that the peak flow has been attained needs to be established) and the diversions should continue, exclusive of ramping, for a maximum of 15 days in Extreme Wet and Wet runoff years and a maximum of 5 days in Wet/Normal runoff years after which, the Lee Vining Creek flows should no longer be diverted to augment Rush Creek maintenance flow releases. There should be no diversions of Lee Vining Creek water to augment Rush Creek maintenance flows during Normal, Dry/Normal, and Dry runoff years. Since higher maintenance flows than the releases identified below are considered necessary in Rush Creek below the Narrows, Walker and Parker creeks should be allowed to flow without any diversions, either for irrigation from above or below the Lee Vining Conduit or into the Lee Vining Conduit, during the Rush Creek maintenance flow period. The peak maintenance flows during Extreme Wet Years and Wet Years would be further augmented by spills whose frequency might be increased above the suggested minimums through negotiations with Southern California with regard to storage patterns. If Alternative #3 is implemented, the following maintenance flows for Rush Creek, at a minimum, should be released below Grant Lake Reservoir and further augmented, as indicated above, by water from Lee Vining, Walker, and Parker creeks:

Extreme Wet Years	500 cfs (5 days) followed by 400 cfs (10 days)
Wet Years	450 cfs (5 days) followed by 400 cfs (10 days)
Wet/Normal Years	400 cfs (5 days) followed by 350 cfs (10 days)
Normal Years	380 cfs (5 days) followed by 300 cfs (7 days)
Dry/Normal Years	250 cfs (5 days) when anticipated runoff is 75-83% of normal) 200 cfs (7 days) when anticipated runoff is 69-75% of normal)
Dry Years	100 cfs (10 days)

It must be recognized that these recommended maintenance flows are only for Alternative #3 and are expected, with augmentation of water from Lee Vining, Walker, and Parker creeks, to provide the necessary flow dynamics to restore and maintain Rush Creek below the Narrows but would not provide sufficient energy to result in substantial stream dynamics to restore and maintain the stream habitat above the Narrows. Adequate maintenance flows for Rush Creek above the Narrows would require flows as recommended by the Stream Scientists in their Draft Stream Restoration Plan. Without adequate flows, there would need to be a continuing program of direct intervention to restore and maintain the stream habitat above the Narrows.

- b. Lee Vining Creek - The effect of the operations of Southern California Edison on Lee Vining Creek flows are much less than they are on Rush Creek. And, since there is no storage capacity below the Southern California Edison facilities on Lee Vining Creek, peak flows (impaired by Southern California Edison operations) can be allowed to flow directly down the stream below the Lee Vining Conduit diversion facility. Excepting for the proposed diversions to augment the Rush Creek maintenance flows, the peak flows in Lee Vining Creek should be allowed to flow down the stream for a minimum of 15 days in all runoff years except Dry Years when the duration should be for a minimum of 10 days. Also, we recognize that the available flows, starting 7 days after the peak flows occur would be attenuated by diversions to augment Rush Creek maintenance flows in Extreme Wet Years, Wet Years, and Wet/Normal Years. If Alternative #3 for Rush Creek is implemented, the total flow of Lee Vining Creek should be allowed to flow down the stream for at least 8 days after cessation of diversions to augment Rush Creek maintenance flows. With recognition that the available flow in the stream will not be sufficient to satisfy the recommended minimum maintenance flows in all years, we recommend that the minimum stipulated flows or the available peak flows when the peak flows are less than the recommended minimum maintenance flows should be released down Lee Vining Creek as follows:

Extreme Wet Years	450 cfs (5 days) followed by 350 cfs (10 days)
Wet Years	400 cfs (5 days) followed by 350 cfs (10 days)

Mr. Peter Kavounias
12 February 1996
page 5

Wet/Normal Years	350 cfs (5 days) followed by 300 cfs (10 days)
Normal Years	300 cfs (5 days) followed by 250 cfs (10 days)
Dry/Normal Years	200 cfs (15 days)
Dry Years	75 cfs (10 days)

- c. Walker and Parker Creeks - We recommend the maintenance flow schedules for Walker and Parker creeks as outlined in the Stream Scientist's Draft Stream Restoration Plan. We further recommend that, when the Walker and Parker creek flows at the Lee Vining Conduit are not adequate to provide the stipulated maintenance flows for those streams, the peak flows available at the Lee Vining Conduit should be allowed to flow down the streams as maintenance flows for the indicated durations.
6. The flows necessary to maintain the stream habitats as dynamic systems while the level of Mono Lake is being restored do not differ from those needed after the level of Mono Lake is restored. Therefore, the flows needed to restore and maintain the stream habitats during the transition period need to be continued after the level of Mono Lake has been restored.
7. The streams and their habitats need to be regularly monitored to determine that they, in fact, are functioning as dynamic systems and are being restored and maintained in accordance with the stated objectives. Based on the results of the monitoring program, the timing, magnitude, and durations of the flows will also need to be periodically evaluated and may need to be increased or decreased in order to continue to meet the stated stream restoration and maintenance objectives.

cc: Mr. Edward Anton
Mr. David Allen
Mr. Jim Canaday
Mr. Jim Edmondson
Ms. Lucy McKee
Ms. Sally Miller
Mr. Peter Vorster

Termination Criteria for Rush Creek and Lee Vining Creek

The following quantitative estimates for main channel length, main channel gradient, main channel sinuosity, and riparian vegetation acreage by reach segment were summarized from Ridenhour et al. (1995) *Draft Work Plan, Mono Basin Stream Restoration*, October 4, 1995.

Rush Creek Main Channel Length (ft)

Reach	Pre-1941
1	4,100
2	4,820
3A	3,800
3B	3,100
3C	6,940
3D	3,370
4A	3,070
4B	7,810
4C	4,360
5A	<u>7,320</u>
 Total	 48,690

Lee Vining Creek Main Channel Length (ft)

Reach	Pre-1941
1	4,500
2	7,400
3A	3,500
3B	4,200
3C	<u>1,360</u>
 Total	 20,960

Riparian Vegetation Termination Criteria

For the following acreage to satisfy termination criteria, woody riparian establishment will require mature trees of diameter and height as occurred in pre-project riparian communities. If site-specific analyses determine the existing condition, or projected future condition, precludes restoration of the pre-project riparian condition, other suitable species will be established that are functionally equivalent in fishery and stream ecosystem benefits.

Rush Creek Riparian Vegetation (acres)

Reach	Pre-1941
1	6.2
2	5.0
3A	21.5
3B	2.9
3C	11.2
3D	10.0
4A	26.3
4B	80.2
4C	38.7
5A	37.8

Lee Vining Creek Riparian Vegetation (acres)

Reach	Pre-1941
1	20.0
2	30.0
3A	22.2
3B	32.9
3C	4.0

Termination Criteria for Fish Population Structure

1. The fish populations in the streams subject to D-1631 will improve as habitat recovers over time.

2. Pre-project conditions included the following:

A. Lee Vining Creek sustained catchable brown trout averaging 8 to 10 inches in length. Some trout reached 13 to 15 inches.

B. Rush Creek fairly consistently produced brown trout weighing 3/4 to 2 pounds. Trout averaging 13 to 14 inches were regularly observed.

(D-1631, pp. 21, 54-55).

3. The monitoring team will recommend one or more additional forms of the fish population criteria. The monitoring team will consider young-of-year production, survival rates between age classes, growth rates, total fish per mile, and other quantified forms, although this Settlement Agreement does not compel the choice of any one form. The monitoring team will recommend the form or forms which, in its judgment, best describe the structure of the fish population which existed in each of these streams before 1941. For this purpose, the monitoring team will consider monitoring results, the D-1631 record, and comparisons with other Eastern Sierra streams, as appropriate. The monitoring team will make this recommendation for each stream not later than when it finds that such stream has achieved the termination criteria which relate to habitat conditions.