



RL Harris Stakeholder Board Meeting

December 1, 2004

The Harris Stakeholder Board met on 12/1 to update participants and re-establish where the Adaptive Management process stands. The long interval since the last meeting has increased frustration and created some new challenges.

Discussion highlights and presentations follow.

There has been some drift from the original Stakeholder Board Charter ratified on 5/21/03. A copy of this document is attached. Discussions have focused to a large degree on establishing flow rates instead of achieving an adaptive management framework that would enable partners to measure a series of variables and make changes based on what can be measured. It may be beneficial to begin with a review of the original Board agreement.

A recommendation was put forward for each stakeholder group to develop a 1-page summary and a minimum starting point for each team to continue the dialog. This summary should include

- Each organization's perspective on where the process is
- What should the starting point be for continuing the dialog?
- Get these to Katie Mickett

The next meeting of the Harris Board is tentatively scheduled for 1/20.

Discussion Highlights

Dr. Elise Irwin opened with a presentation on adaptive management and a review of why we're here. (Presentation attached). We are in search of some flow we can live with. We are looking for beginning-point management options that could be written or informal policies. "In this era of explosive expansion in access to information, it is now possible to achieve misunderstanding more broadly and rapidly than ever before." Dan Asche USFWS

Dan: We need to restore a flow from Harris Dam stakeholders can live with that approximates a natural flow.

Elise: Biological and societal needs should be a component of this plan. We're flooded with information each day. We've got to be careful how we're making decisions and reacting to information. (Catfish example where the picture was of a giant European species, but it made the internet rounds so quickly, and was labeled as an American cat, that the misinformation took hold, even with biologists that should have known better.). Real examples of where anyone is combining science and management are rare. This is a true means of combining the 2 in a scientific arena to learn how to adapt management over time.

Facilitator: We started with Adaptive Management Approach, but we've also had negotiations that have taken place. We've been good about being transparent with the team. *We've got to get away from positions that lock us into final flow rates or solutions.*

April: I have a comment on the skunk works issue. We have no problem with agencies talking behind closed doors, but it seems somewhat sneaky to learn that other modeling was taking place. It would seem fairer if there was a quarterly update provided to all stakeholders. Concern seconded by Conservation Unlimited.

Elise: I didn't mean to bring this up in a skunk works context. This was the two of us sitting at the water resources conference.

Conservation Unlimited: We have been out of the loop for a year on updates here.

Elise; Stakeholder's can contact Katie at any time for an update.

Facilitator: Better communication would be an advantage to us all.

April: We need to learn and keep up in the process and don't want to be shut down on updates and learnings.

Elise: It's been an extremely busy year for the Power Company. Everyone has struggled to find time to get everything accomplished.

Willard: We did discuss some potential funding alternatives, but I don't recall any meetings where negotiations took place.

Elise: The purpose of tonight's discussion is to update everyone and to reestablish where we are.

APC Adaptive Management Activities Since 11/3/2003

Updates on last November's requests to examine what it would take to modify spillway gates or provide modifications to deliver a spillway system.

Danny Meyer, Project Manager provided this information. APC did not engage a design engineer to estimate these cost estimates

1. Trash Gate Modifications

Gates are 40 ft wide. Less than 40 cfs is not feasible. The modification was deemed not possible due to inability to pass flows less than 500 cfs. Seals on the gates make them vulnerable to damage. It is anticipated that gate seals would incur considerable damage during extended periods of high velocity discharges. This modification is considered unfeasible unless the gates were physically modified.

2. Penstock Drain System (as on Warrior River)

To enable valving and piping necessary we would need more physical space. The modification was deemed not possible due to insufficient space for piping and valving needed. The pod gallery does not accommodate this.

3. Penetration through Headworks Structure

Substantial pipe would need to be punched through the dam structure. The modification was deemed not possible due to location of concrete piers and construction joints.

April: Does this mean a pass-through pipe through the side of the dam?

Yes

4. East Non-Overflow Structure Siphon

A conceptual piping and valving scheme was investigated just east of spillway structure. A 4 ft diameter pipe with a custom designed valve configured to limit velocity to 12 feet per second (design code restriction) would restrict flow to 150 cfs at an estimated capital cost of \$685,000

- Not possible to the west; possible to the east
- ASME has a code limiting velocity to 12 ft/sec to limit caviatation
- Capital costs of approximately \$700k to deliver 150 cfs
- 300 cfs was requested (\$1.5 million projected capital cost to deliver)

Other questions included what was meant by geotubes, pulse and schemes (Stan?)

APC was requested to examine 32 cases of a preponderance of various schemes

- 4 variations were considered with/without geotubes showing fluctuations and velocities and predicted flows at Wadley
- 4 variations under 8 conditions were examined

Velocity using geotubes were questioned at last November's meeting

Plotted estimation and velocity curves through notch flows

From that questions on pulse flows resulted. Volumes behind geotubes were limited.

Do we do this with or without geotubes?

4 aspects of pulse and scheme were examined and provided to agency

75% of Heflin flow

Gauge out of service: ¼ of the flow to Harris

- Not below a min of 100 cfs/per day
- Would not engage this during flood control event

- Would not engage if it jeopardizes ability to fill RL Harris reservoir in the spring (would involve public dialog and discussion)

Is a Spring spawning window possible for 2004?

This was discussed and initiated in consultation with Elise and Andy Shepard to determine criteria and implementation. 7-8 aspects were developed for the spawning window. APC requested a variance from Corps of Engineers. This was granted above the rule curve. 2-week period of 1 unit operation was run in a pulsed scheme.

Fish samples were collected during this dry period.

Elise was able to capture juvenile bass at the Wadley site. Her team will be able to determine if they hatched during the spawning window during a study that will take place this winter.

Stan requested an evaluation of 64 additional scenarios for flow. 32 were run. The variability of these was studied. Results of these modeling results was also shared with April.

A dry August resulted in some funding requests for data collection from Elise to study the middle Tallapoosa River. APC was asked to consider a fall spawning window.

Are there connections to the fall hurricanes?
We can't say.

APC developed and proposed a scheme for a fall spawning window. It was postponed 4 times due to hurricanes. Due to cooling temperatures it was determined there was probably little value to the fall spawning window (Elise).

Support of boating activities and the connection to morning pulse was reviewed.

The speed of the pulse coming down the river and if it created too much turbulence was examined.

27 shoals and pools exist between Harris to Wadley. Following a morning pulse is it possible to navigate between Harris and Wadley after a 1-hr generation at 9 am.? The APC team followed the flood wave to Wadley. It reached Malone around 11 am. Shoals were level pools with a steady flow as they progressed down the river. Traveling at 3 mph we slowly outpaced the flood wave. The model confirmed this.

A 1 hr generation in the morning enables adequate flow to run a canoe from Harris to Wadley

Wide areas in the river system (i.e. Rock Gardens) remain floatable. (Especially to the right side

1 morning pulse enables a canoe to run this distance

April: was a house turbine alternative estimated? When were these provided?
At an earlier meeting in Wedowee...do not have this figure here

Additional information was requested by April last fall. Capital cost, %
Bill provided flow rates to 2 house turbines and associated costs

Kevin: How long would you have been able to float the river following the morning pulse?
2-3 hours

Kevin: If less water could be released over a longer time would the river remain floatable longer?
i.e. 2-30 minute peaks

Willard: IF this was possible....it does not appear to be

Discussion on AL DCNR Presentation

It seems like there are perceptions that a lot more is going on than actually is. This is not actually a proposal on our part.

When we discussed alternatives last November and the implications on flows we were simply looking for additional information. DCNR wanted to determine if GTs would do what we thought they'd do. We wanted to understand their potential affects on flows. 25 structures were judged to be far too big so we went with a smaller, 4ft structure.

We asked a series of questions and followed up with APC in December. As we investigated this the idea of pulsing to meet targets at Wadley were re-examined.

We considered this data for a while. As we examined GTs it was DCNR's opinion that they would be OK at low flows, but beyond that they didn't seem to be that beneficial. We began to back away from them gradually.

Pulsing to meet Wadley target was intriguing. Meeting a Heflin target with real-time information to duplicate a closer natural flow regime. We are still unsure this can actually be accomplished. Measuring the upper 1/3rd of the river was still a question mark.

Our communication was simply a follow-up to APC; not a proposal. We have not heard back from APC

Facilitator: We are caught up on communications

Bill: This is a continuation of requests and communications

Stan: we were trying to better understand what was being proposed. We want this to establish some starting flow for initiating an adaptive management process. We haven't gotten to the point of measuring success or failure. If we can start monitoring and evaluating goals we have a period of time between now and 2023 when Harris needs to be relicensed.

If we can begin monitoring the Harris flow now. By the time relicensing has to happen we may have a solution

Facilitator: Didn't we identify the gauge as our preferred option?

We agreed this was a starting point. Where it was measured did not get determined

Heflin gauge accounts for about 25% of the annual flow measured at the Wadley gauge.

Facilitator: Is this close?

Bill computes 31% using a drainage factor. He believes this is a proportional indicator; reasonable.

Recommend some daily average factor with a targeted continuous flow for 24 hours. The delivery system would have to be identified before we could nail this down. Bill has no heartburn one way or the other as long as monitoring could be done reliably.

MTRA: Target flow will be continuous for 24 hours? This would be change for the better

When the MDA at the Heflin gauge is 300 cfs or less, than the minimum target flow will be met by a continuous non-pulsing release from the dam, and measured at the dam.

When the daily flow target is 301 cfs or higher, the min target flows may be provided by peaking and/or daily pulsing of turbines at TL Harris dam and measured at the Wadley gauge

A continuous minimum daily flow of 300cfs during nongeneration periods will be maintained from the dam when the target flow is 301 cfs or higher

The flow is measured at the dam. The minimum target flow at Wadley will remain in effect

Facilitator: There is no magic about the 300 cfs figure. It was put forward as a starting point we believe could be a good reference point

Willard: I thought the 300 cfs kicked in every month of the year.

Stan: as long as continuous flow doesn't drop below 300 cfs at the dam you'd be OK

Willard: Any time the target is above 300 cfs you'd have to pass 300 cfs at the dam?

Facilitator: IF 300 cfs is the target number. This may or may not be physically possible

Stan: A range of dry season alternative may affect this. We also asked APC to continue investigating the use of turbine pulsing for meeting target flows. We want to learn how the equipment might be better utilized to minimize impact on the environment. As more technology becomes available we want to continue to examine new systems and alternatives.

DCNR recommends that the use of geotubes be dropped from present discussions. Minimize negative effects of pulsing/Delivery systems to get the desired flow rates. Geotubes only showed benefit in low-flow areas.

April: Why October?

It was considered the best float trip month and being able to restore the traditional float fishery opportunities of late September/early October was identified as an early priority.

Stan: Assuming we get there this condition may not be necessary due to natural flow. It's a goal we've set in the model.

Elise: by meeting Heflin flows with pulsing, the initial assessment is very positive

Stan: if a target of 25% of historical flows would enable traditional floats

What about structure modifications as possible options?

Are there other siphons in place in other US locations?

Would these have a beneficial effect on DO to improve water quality?

Stan: This would be a factor in making our decision on a delivery system. Harris has an existing siphon system. This has improved DO by skimming from the top of the level



Willard: To have a siphon system that works, the lowest end has to be significantly lower than the surface of the water. The actual results will be to suck colder, less oxygenated water, decreasing water quality.

What about a pulse for 20 min in the morning and 20 in the afternoon?
This was examined with and without GTs

A Review of Flow Operational Plans at R.L. Harris Dam

Attached.

April: the difference indicates that a release would be continuous?
Exactly

Summary

1 plan has about a 2.5x impact on APC the other has about a 16% impact
It would cost \$1.5 million to construct

April: How is impact calculated?
Not dollars-denominated terms. As a percentage of potential operation
Has overall financial impact been analyzed?

Willard: No

For Sat/Sun continuous flow there is not impact calculated
All have releases 7 days/weeks

Was there any calculation between 1 unit or 2?
It was kept it at 1 unit for consistency. 2 unit operation causes the flow to drop in 6 hours instead of 3.
Elise: Yahoo!

Stan: What about the time of operation? Isn't there a change of operations on the weekend?
Yes. There are times the time of operation doesn't.

Willard: Another aspect the current license requirement of 45 cfs is NOT suspended. We pulse on weekends to insure we stay above this level. Current operations have a target at Heflin that require pulsing at Wadley.

Magnitudes of generation show Sun thru Sat

What about the rule curve for the water levels at Lake Harris? What affect would this have on lake levels?

None of these plans would affect rule curve operation

Bill will share electronic copies with the team

Round II (After Break)

Where are we?

Examining a series of starting point we have 3 alternatives. **Decision:** Forget Geotubes

Facilitator; We need a starting point all of us can agree is reasonable
Let's focus on the red and blue boxes for our next round of discussions



Blue plan represented the complete model (75% of Heflin flow)
Red model represents the 300 cfs continuous (100% of Heflin flow)

April: are you asking us to pick a plan?

Facilitator: No, but is the truth somewhere between blue and red? Where is a balancing point between zero and some minimum flow that would be a starting point?

Are we talking about a continuous flow?

All of the pieces Bill discussed would move us from zero to something else. There is not certainty that just one will address any of this. We should begin with what it might be possible to do now. This is the blue model.

Facilitator: Is there any level of pulsing, weekend rates, spawning rates (all of which are in the model), some number between 0 and 300 we can start with?

Willard: Without spending 1/5 mm to \$2 mm to get a continuous flow below Harris dam will involve significant capital expense and from Bill's study will have an unacceptable impact on power generation below Harris dam.

Facilitator: Is the price of a solution to a min flow complicated by a lack of data?

The Blue plan is between the 6% and the Red plan. There is no guarantee that this will be the best possible outcome for everyone. Ratepayers need to be part of the consideration.

April: suggestion would like some time to absorb this. All of us are getting older.

Kevin: We've spent a year doing nothing and establishing very little

Facilitator: Actually no. The blue plan represents a significant shift in current operations.

Do we need to forget about alternatives?

Willard: The red plan involves a combination of big bucks and a significant reduction in power generation to APC. On Blue plan the impact is 6.2% without a capital outlay. Under Red plan the impact is 16.5% AND there is \$1.5 to \$2 mm capital outlay

Willard: There is not information on the table to show that implementation of the Red plan would improve significant ecological benefits or erosion in the model. There is little to prove that the capital outlay provides benefit above the blue plan

Facilitator: Adaptive Management means there is great uncertainty in all plans.

Gallery: If it takes a million dollars to fix it APC needs to fix it. The blue plan does not represent difference to the anglers.

Stan: I take issue with assertion that changes in flow don't support an increase in flow doesn't benefit the resource. The only issue is that even with additional study APC is unwilling to consider additional investment

April: The number of lost generation hours is meaningless to us. How this affects APC's operational revenues needs to be considered.



Facilitator: The blue model was our best stab at a starting point in April. We're confirming Stan wants more and continuous flow. Did we establish this?

The geotube alternative appeared to have a significant outlay requirement of \$3-400K. Not concrete...fabric filled geotubes. After 64 evaluations it was determined that these were not the way to go.

Facilitator: is there ANY starting point for this? What is APC willing to do to start with?

Willard: The blue plan. There will be no minimum flow or no constant flow at the dam. We are not willing to make any modifications to the dam at this stage. The answer is not at this time.

We won't get anywhere until we make some changes.

Facilitator: With some data we might be in a position to actually make some real changes, but we must pick a starting point.

Willard: When we started this process we made a set of agreements. One of the bounds APC agreed to was an unacceptable financial impact. When we presented the information between releasing through a pulsing operation vs. not going through the generators we stated at this time the alternative was unacceptable. We agreed to examine other alternatives, but we have always stated that if the economic impact of this process became too extreme we would not agree to the solution.

Facilitator: Financial impacts were recognized at the process kickoff. At this point in time blue plan is in play.

Kevin: Will they go any further any time, or is this another year's worth of stalling?

Elise: I'm hearing different things. I've got to support Stan's use of the empirical data from other locations that show increased flow rates are beneficial. On the other hand we don't know what the blue plan will deliver. Its weekend flows are different from the black plan. We are fixated on the zeros in this discussion. It might benefit the river a little; it might benefit the river a lot. My concern is if we begin with the blue plan, if we get 2-3 years down the road and fail to meet the resource goals for monitoring we aren't going to change anything.

Facilitator: I heard Willard clearly state that Alabama Power was not willing to make the additional investment. His exact words were, "not at this time." I didn't hear not ever. Let's start here as it results in significant changes in the operation. We have not addressed the zero column. Let's learn what we got from this and what it carried forward from our plan.

Gallery: 2 hours of water a day? What benefit will this have on the fish? This will drag out forever if we don't have some assurance of what Willard means.

Crooked Creek below the dam and associated shoals is bound to benefit if the pulse runs twice a day. It is a better plan than current operations. More consistent water at Malone.

Gallery: I want to show some photos from the mid -70s. Presents slides of Crooked Creek and views showing mud and erosion.

Stan: The one positive from this session is we may be reaching a conclusion on this process. I'm concerned that if we agree to the blue plan we haven't agreed to anything significant or made much of a commitment to a long-term solution.

Kevin: If this is a palliative to keep everyone happy for a couple of years nobody will be happy



USFWS: The Red plan requires minimum flows that can't be delivered economically. We would like to pursue other alternatives for meeting minimum flows.

Facilitator: It's not the \$1.5 million capital costs that seem to be the problem for Alabama Power; it's the loss of 16% power generation

Gallery:

Why can't this offset be recouped at Martin?

Why can't the installation of a house turbine offset this capital cost over time?

Willard: \$5-7 mm capital cost

Elise wants to return to flexibility and adaptability. Cornhouse creek doesn't look very good on the upper section of the river, but the good news is the biological communities, while they have been affected, can show improvements. We don't know what is going to produce these improvements. More water isn't automatically the answer. At Jordan Dam we have too much water.

Gallery: Wasn't part of adaptive mgmt attempting to mimic the natural river flow?

Elsie: No

Elise: The black option is one of those available to us, but it isn't an acceptable one. FERC lawsuits have been threatened. The reason we're here is to begin to understand causes and effects.

Gallery: Which plan would you recommend?

Elise: None of these! We don't know enough about what we need to ask for in terms of flows. Can't speak intelligently about natural flows. We don't know the minimum flows. We've got to determine the resource objectives and the time frames for identifying this in an iterative process.

We know 2 unit operation is really bad for spawning sunfish, but I don't know what the right thing to do is. Even if we start with the blue plan and monitor for several years we could get more hurricanes or droughts. These things make changes difficult to monitor in the system. We'll either do something soon, or I'll be working in the Coosa system.

Facilitator: Lets put a wrapper on it for this evening. Bill is open to questions on the data to address April's request. The next question we need to decide is flexibility part of moving forward for APC. Are we willing to start at blue and learn from there?

Willard: The blue plan was a pulsing operation that pulses 2x a day. We indicated we'd look at a different frequency. The letter Stan sent in Sept requested a different pulsing frequency. This is a possibility. Options are open to look at a more stable flow over a larger portion of the river. Will this improve the upper half mile of the river or not? We don't know.

Facilitator: How close to the dam are we going to get with our biota goals? If we start with the blue plan is APC willing to consider minimizing 2-unit operation?

Willard: Anytime 2-unit operation is scheduled we delay 2nd operation until 1 has been on for at least an hour

Facilitator: Minimizing and delaying have both been done by Alabama Power and are part of current operations, so we have made some improvements.



Elise: We haven't examined any specifics on spawning or boating windows. There haven't been any requests made formally.

Gallery: Fishermen haven't seen any real difference in water levels. We have differences on the meaning of minimizing.

Facilitator: Proposal from here:

1. Will examine Stan's pulse requests – adding a Noon or Midday pulse
2. Establish some more formal spawning and boating goals
 - a. Elise: impact of each change has to be measured in the model
3. Bill is available for question on the data sets
4. Additional data has to be evaluated
5. The impact of blue vs. black options should be examined
6. Geotube discussions are dropped from here going forward

April: We would like to know what the financial threshold is? We're missing financial information on geotubes from past. It should be fair to better understand what financial constraints are.

Facilitator: We don't have a common currency to compare what a lipstick darter is worth vs. a kilowatt. The best thing is for each stakeholder group to develop a 1-page summary and a minimum starting point for each team to continue the dialog

- Where is the process? from each stakeholder's opinion?
- What's the starting point for continuing the dialog?
- Set commitment dates for assessment? 2 weeks is ok
- Get to your one-pager to Katie

Facilitator: if we can get everything together in 2 weeks is it worth a recap in 30 days?

Mid January: between 2nd and 3

January 20th

Proposed Purposes of the Board (1.1)

- Managing and improving a single source Adaptive Management Model for science-based decision-making
- Providing a forum for judging the success of the Adaptive Management process that will continuously improve and refine the model
- Balancing river restoration with hydropower generation and reservoir needs
- Examining and recommending consensus-based modifications to operations from RLH that improves river conditions below the dam
- Exploring and communicating issues that could be impacted by recovering the river below the dam

Recommended Guiding Principles

- Membership on the Board will never preclude a member from exercising their rights (individually or on behalf of the group they represent) and acting independently
- The model is a tool, not a decision package that produces automatic outcomes. Ultimate choices will be made by participating resource agencies and members. The Board will influence these decisions, but will not have authority to impose them.
- Recommendations of the Board need to carry weight. Speaking with a strong, unified voice is recognized as the chief means of accomplishing this. Strongly supported, consensus-based recommendations will be a guiding principle. Such positions will provide credibility and help avoid court-imposed solutions that are unsatisfactory to all.
- Strong, consensus-based recommendations will gain attention and respect from FERC. This must be considered as well.
- The Board will be a very long-range project continuing over time. 5-7 year participation should be expected from member organizations
- Board members will strive for a more candid discussion of difficult issues in face-to-face situations and less public confrontation in the media. Confrontational approaches are recognized as generally unproductive to the process.
- Board members may want to agree to specified "wait and see" period (6-



months?) that will enable the process to get established. During this period, members will agree not to toss any legal "bombs" or initiate new post card campaigns.

- Early tangible progress will enable some Board members to demonstrate positive results. This will enable and encourage continued participation.

A draft will be prepared and submitted at the next Board meeting by Katie Mickett

Harris Objectives (Version 1.1)

1. Maximize water for economic development

2. Maximize economic development opportunities

3. Maximize native fauna diversity and abundance

4. Maximize native floral diversity and abundance

5. Minimize bank erosion downstream from Harris

Planned - controlled growth in the watershed area for ag, retail, commercial and industrial areas

6. Maximize reservoir water level

Minimize bank erosion UPSTREAM from Harris was proposed

This CAN be included in the modeling, but potentially, this is a huge issue. Modelers advise considering thoroughly the scoping implications if this is added to AM objectives

Boat traffic a key factor

The precision of cause/effect has a lower degree of confidence for the model builders

7. Maximize water (economically) available for consumption

8. Maximize reservoir water quality

9. Maximize reservoir angler/recreation opportunities

Swimming access opportunities at Lake Wedowee are limited and largely confined to boat docks & ramps. Flat Rock is the only alternative for many residents.

Swimming access to the lake would be useful to some homeowner associations.

10. Maximize boating opportunities downstream from Harris

Maximizing boating opportunities upstream from Harris suggested as well

11. Maximize angler opportunities downstream from Harris

This needs further discussion and clarification. It could mean either access or angler success. Not everyone baits their hooks when they go fishing. Need to agree to agreement on the assumptions here. What are the

opportunities downstream?

12. Minimize total cost to APC

13. Maximize APC operation flexibility

14. Minimize river fragmentation

15. Maximize water quality downstream from Harris

This may present an opportunity for increased monitoring of water quality coming into the reservoir. This is already covered in objective 8.

16. Minimize consumptive uses (net loss)

Appendix

Adaptive Management Workshop Guidelines

Developed 5/1/2003; Ratified 5/21/2003

Process Objectives

The purpose of this process will be to engage the Tallapoosa stakeholders to determine if a consensus-based recommendation that can be accepted and adopted by Alabama Power Company for managing flows on the river.

For the Adaptive Management recommendation to be successful, Management Objectives of the power company and the Resource Objectives of stakeholders must be evaluated to determine if a "common ground" can be identified that will satisfy the greatest number of constituents.

Needs Analysis

Agrees

- There are levels of uncertainty regarding various solutions and needs to be addressed as part of the adaptive management process
- Operations of RL Harris continue to negatively affect aquatic and terrestrial organisms
- RL Harris provides substantial economic benefits
- The level of impact diminishes downstream
- Flows need to be changed
- The results of changes to the operations of the dam need to be monitored

Disagree

- Flows need to be increased
- 2 unit peaking without ramping should not be acceptable

Purpose Statements of the R.L. Harris Dam Stakeholders Board

To account for and appropriately balance the competing interests of all R.L. Harris stakeholders through the development and implementation of an Adaptive Management Model for information-based consensus decision making; and to improve and refine this model through long-term, continual examination of decision model results and impacts..

CHAPTER I PURPOSES AND PRINCIPLES

Article 1

The Purposes of the R.L. Harris Stakeholders Board are:

1. To seek a balance between river restoration, hydropower generation, and reservoir needs through the implementation of an Adaptive Management Model for information-based consensus decision making;
2. To improve and refine this model through long-term, continual examination of decision model results and impacts.

Article 2

The Board Members, in pursuit of the Purposes of the Board, shall act in accordance to the following Principles.

1. The ability of Members to exercise their rights (individually or on behalf of their represented group) and act independently shall not preclude Membership on the Board.



2. Established and newly created laws, regulations, and other legal agreements will be respected and incorporated into discussions and decisions.
3. The decision process will be long-term and continuing; Members of the Board will make commitments accordingly.
4. Board Members will seek to communicate openly and honestly about the needs of their interest groups. If needs are not addressed, they will not be served.
5. Members of the Board will strive for candid discussion of difficult issues in face-to-face situations. Confrontational public approaches will be recognized as generally unproductive to the process.
6. Board Members will make every effort to be flexible and open to new ideas and to the input of fellow Members. No extreme positions that would result in dramatic win/lose proposals for Board Members will be introduced into Board discussions.

CHAPTER II MEMBERSHIP

Article 3

1. The Members of the R.L. Harris Stakeholder Board shall be appointed, elected, or clearly identified spokespersons for their respective interest groups.

There shall be one spokesperson per interest group.

Article 4

1. Membership in the R.L. Harris Stakeholder Board will be open to all groups who have a direct interest in the decision process, i.e. specific recreational, economic, or ecological interests in the water resources impacted by the R.L. Harris Dam.

2. The process will not regress due to the entry of new Members.

New stakeholders will familiarize themselves with the process-to-date and contribute to the discussion from their point of entry.

Article 5

A Member of the R.L. Harris Stakeholder Board who has missed two (2) consecutive meetings, and who has not provided an adequate Alternate, will be asked to resign.

CHAPTER III RULES OF ENGAGEMENT

Article 6

1. Members of the Board will make at least a five- to seven-year commitment to stay engaged in the decision process.

2. Board Members will commit some level of time, talent, or treasure (resources) to the effort.

Article 7

1. A Technical Advisory Group (or Groups) (TAGs) will be established. The TAGs will consist of model builders, neutral biologists, neutral economists, and other technical experts as seen fit by the Board.



2. The TAGS will not act as decision-making bodies, but will solely serve an advisory role.

Article 8

1. A facilitator will be employed to guide the early stages of model development.
2. A project manager will be sought to coordinate Board activities.
3. A Board Chairperson may be elected in the future if the Board deems it necessary.

Article 9

1. Regular agendas and times for Board meetings will be planned and posted well in advance to enable maximum participation.
2. Before being incorporated into decision-making, scientific findings will be distributed well in advance of Board meetings to enable adequate technical preparation by Board Members.

CHAPTER IV DECISION-MAKING

Article 12

1. The Board will seek consensus in all decisions, but when a vote is required, a two-thirds (2/3) majority will constitute a decision on the model and basic objectives.
2. A quorum will consist of one (1) Member more than half (1/2) the Membership of the Board. With quorum, meetings may take place, but decisions will always require two-thirds (2/3) majority of the Membership.

Article 13

1. Members of the Board may bring Alternates or Technical Advisors as non-voting participants.
2. Alternates may vote if the Board Member is not present, provided the Alternate has attended Board sessions regularly and/or is well informed on Board issues.

Article 14

Post-decision minority positions will be captured for later review.

Article 15

1. Proxy voting will be acceptable only on issues pre-determined by the Board.
2. Teleconferencing will be acceptable only under special circumstances, as determined by the Board.

Article 16

Public input will be part of ongoing meetings and operations, but any such input will be strictly non-voting.



CHAPTER V RATIFICATION AND SIGNATURE