

# Reservoir-Related Recreational Use at The Hells Canyon Complex Technical Report E.5-2

Polly Gribskov  
Recreation Planner  
Baker Resource Area  
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## 1. INTRODUCTION

This report contains information about the amount, timing, location, and type of reservoir-related recreational use in the HCC. The goal of this study was to obtain information about current and potential recreational use and users at the reservoirs. This information, when combined with the results of a review of obtainable past information about recreational use, was to provide for the identification of important recreational use issues and trends in order to develop a plan to protect, mitigate and enhance recreation resources associated with the HCC.

## 2. CONCLUSION

Pg. 14 – “The Snake River Road – for most of its length a well-maintained gravel road – runs parallel....” “The third route takes Homestead Road, which is gravel....”

*It is important to point out that Baker County is responsible for 100% of the maintenance on these two roads. It is questionable as to whether these roads would fit the descriptor “well-maintained.” The study did not gather any evidence that would indicate the public’s satisfaction with these two roads. Since the Hells Canyon and Oxbow Roads are maintained by IPC and happen to be paved, there may be some variation in opinion. The two county roads are the only access to all of the BLM recreation sites. These roads travel through approximately eighteen miles of BLM lands which are adjacent to the reservoirs.*

Pg. 16 – “All four IPC parks have full-time, on-site maintenance personnel.

*BLM agrees. No BLM facility can boast this kind of public service. IPC may have a greater responsibility to fund such operations and maintenance at non-IPC facilities. The study did not analyze project impacts and appropriate share of responsibility.*

Pg. 19 & 20 – “BLM Sites and Amenities” “BLM owns this site, and IPC maintains it.”

*This section lists Oxbow Boat Launch which is BLM owned. Carter’s Landing is listed under IPC nonpark Recreational Facilities on pg. 17. Since Carter’s has the same status as Oxbow Boat Launch, they should be listed together. It has been determined that Oxbow Boat Launch and Carter’s Landing areas are located within*

*the boundaries of the Hells Canyon Project No. 1971, which was licensed by FERC in 1955. Since Idaho Power did not obtain a separate permit from the BLM for these areas prior to the October 24, 1992 date referenced in section 43 USCS 1761(d), no permit or right-of-way is required from the BLM now. However, the past and continuing operation and maintenance of these sites by IPC sets a precedence regarding IPCs responsibility for on-going operations and maintenance of BLM recreation facilities. Virtually all BLM recreation sites, developed and dispersed, lie within the project boundary. There is inconsistency in management and funding.*

Pg. 24 – “Although Heller Bar is not within or adjacent to the HCNRA, it provides significant access for boaters accessing the HCNRA through the Cache Creek Portal.”

*This suggests that IPC has a project impact on Heller Bar. Therefore, they are partially responsible for O&M at Heller Bar.*

Pg. 26 – “...and between 1995 and 2001, the cooperative arrangement that IPC had with federal interests in implementing portions of the Federal Columbia River Power System (FCRPS) biological opinion flow augmentation, which is intended to avoid jeopardy of the FCRPS operation below the HCC.” Pg. 27 - “...IPC cooperated with the BOR and other federal interests in these flow augmentation efforts by shaping (or pre-releasing) water from Brownlee Reservoir (and later refilling the drafted reservoir space with water released by the BOR from the upper Snake River reservoirs) and by occasionally contributing water to flow augmentation efforts.... The agreement reimbursed IPC for any energy losses.... The agreement expired in April 2001 and has not been renewed by BPA.”

*Since the agreement expired in April, there were no midsummer drawdowns in 2001 or 2002. Recreation use and crappie populations immediately responded with higher numbers in 2001, and another significant increase in 2002. Neither of these years, or similar years (1988-1992) were used in the study.*

Pg. 26 – “After flood-control requirements have been met in early summer, the reservoir is refilled to meet peak summer electricity demands and provide suitable habitat for spawning bass and crappie. The full reservoir also offers optimal recreational opportunities through the Fourth of July holiday

*BLM disagrees. Early summer to July 4 is a very short “optimal opportunity” time period. Also, it states here that a full or filling reservoir is needed for spawning bass and crappie. In other sections, it is stated that drought conditions, not project operations, affect bass and crappie populations.*

Pg. 29 – “Multiple days were randomly selected to be sampled within each [weekend\_weekday] strata and each monthly sampling block....” “The time period during which sampling was conducted each day was randomly selected, and each of the three or four periods was assigned an equal probability of being selected....”

“Timing points within the section were used to maintain a constant speed so that the section would be completely covered within the time allotted.”

*It seems this approach blends use periods so completely, the important data that would drive appropriate PM&Es is lost. Most resource impacts occur during periods of high use. This strata treats weekend and weekdays, time of day, and allotted time as equals. Intuitively, we know weekend use and mid-afternoon are when resource impacts occur and that this use level should drive our management decisions. Is there a statistically built in bias that “waters down” use figures?*

Pg. 32 – “...for 2000 we added 22 recreational-use areas to sampling maps as distinct areas...”

*The data collections were changed each of the six years that were sampled. Granted, they were refined and improved but the result is that only 2000 was a complete sample. It begs the question, would data be different if all six years had been treated the same?*

Pg. 33 – “To arrive at estimated hours of recreation use, we used methodologies suggested by Malvestuto et al. (1978), Malvestuto (1983), and Hoenig et al. (1993).

*It is unfortunate that IPC used the quantifier “hours of use.” All government agencies report use in visits and visitor days. There is no direct conversion from hours of use to visits. In general, it appears the use numbers are low because their samples occurred during abnormally low use years.*

Pg. 34 – “An understanding of two major issues related to recent changes in recreational use in the HCC is necessary to fully comprehend the results of this report. First, fluctuation patterns at Brownlee Reservoir changed dramatically in the years immediately preceding the study period... Second, the crappie fishery experienced a substantial reduction in quality immediately prior to and during the early years of the study period. After 1992, additional releases from Brownlee Reservoir and their subsequent drawdowns were instituted in cooperation with federal authorities attempting to improve downstream conditions for migrating endangered salmon. These measures include a drawdown normally instituted immediately after July 4 and lasting until the end of August;... Usually, the reservoir does not refill before the process of creating reservoir capacity begins to provide a constant flow of water for salmon spawning downstream.”

*BLM agrees. This is the crux of the problem with this study. BLM observations and professional observations would indicate recreation use from before 1981 until 1991 was significantly higher than this study indicates. David Diamond, DOI - Office of Policy Analysis, stated “NMFS requests a drawdown to 2059’ elevation in August. The fall drawdown has exceeded that requirement every year since 1997. That is fully the choice of IPC.” Since the flow augmentation drawdown has such a significant impact on recreation, the study should clearly delineate between NMFS*

*requests and other reservoir management needs. BLM would like to see IPC meet the needs of NMFS and CORPS but not exceed them, especially after July 4<sup>th</sup>.*

Pg. 35 – “...while during 1995, the reservoir was full for four to five weeks and dropped 40 feet during the rest of the warm season.”

*The implication here is that the 40-foot drop was due to a medium-flow year with CORPS and NMFS agreements that drove this water management. In fact, the CORPS required a 42.5-foot drop until May 1<sup>st</sup>. NMFS requested an 18-foot drop in August. Most of May, June, and July should have been filling or near full pool, and at a recreationally acceptable level of less than 20-foot drop the remainder of the warm season. BLM would prefer Brownlee Reservoir to not fluctuate any more than absolutely necessary as required by CORPS and NMFS.*

Pg. 35 – 1986 and 1997 were high flow years. “During 1986, the spring drawdown was about 40 feet, while the drawdown during the same period in 1997 was **100 feet**. In 1986, the reservoir stayed within 10 feet of full pool during the remainder of the warm season, but during 1997, the reservoir **stayed full for about three weeks** of the warm season and then dropped about 70 feet.”

*The point here is that even though 1986 and 1997 were both high flow years, the management of Brownlee was vastly different. The CORPS requirements had not changed significantly between '86 and '97. The Flood Control Rule Curves were revised in 1998. The CORPS requires a drop until May 1<sup>st</sup>, which IPC complies with. The only non-IPC difference between '86 and '97 is the flow augmentation request from NMFS. NMFS requests an 18-foot drop in August. Why was the reservoir full for only three weeks and then dropped seventy feet? From 1995 to 2000 the average draw down in August was 28 feet. It appears IPC may be responsible for the drop the remainder of the warm season and for drops beyond 18 feet.*

*IPC has cited the CORPS and NMFS as being the sole reason the reservoir is drawn down. In The Oregonian, dated 10/22/99, it states, “Craig Jones, spokesman for Idaho Power Co., said the primary reason for the drawdowns has been to provide flows for spring, fall and summer Chinook salmon and for steelhead trout.” There are approximately 20 newspaper articles that quote or imply that the post flood control drawdowns are all due to NMFS requirements. In fact the Baker City Herald, dated 10/21/99 states, “James explained that the five turbines in the dam produce peak power when the reservoir is full. “I’m a power guy,” he said. “What I’d like to see is a full reservoir.”*

*This study does not make a clear distinction between draw down levels that are outside the control of IPC, and what levels are at the discretion of IPC. The data available to BLM indicate contradictory information.*

Pg. 35 – “This period of phenomenal crappie angling was probably caused by the series of drought years that allowed juvenile crappie to accumulate in the system, rather than

being flushed out by high flows.... The study efforts described in this report begin with 1994, when the “crappiethon” was already over.”

*If this is a factual statement, how does it correlate with the data that indicates 1981-1983 where high-flow years and the crappie population was also at a peak. To substantiate this statement, the study needs to review a wider time frame. Many people find a correlation with the drop in crappie population in 1994 with the late season reservoir fluctuation. Is it only coincidental that the late season drawdowns occurred from 1994 to 2001 and the crappie population was very good pre and post those drawdowns exactly?*

Pg. 38 – “Warm-season park use by activity generally decreased during the study period. The one notable exception was picnicking, which increased... 159% of the 1994 totals.”

*The unwritten statement here is that the study focused almost exclusively on angling and how crappie populations drove use figures. I feel the study bias did not adequately consider non-angling uses. This is the only statement that even mentions picnicking. What is the reason for the phenomenon? Would there be more use in non-angling activities if they were managed for? The study results do not provide meaningful data to drive PM&Es outside of angling needs.*

Pg. 43 – “This subzone [Hells Canyon Reservoir] is the only area in the HCC where personal watercraft and water skis are consistently used, although neither activity contributed more than 5% of the total during any year.”

*BLM questions this finding. This data may reflect the built in bias of the study that targets activities that are long term and stationary. Water sports may also prove to be an under utilized opportunity at this time. I expect water sport use to increase dramatically as other reservoirs closer to population centers become more crowded. Hells Canyon and Oxbow Reservoirs may become “discovered” within the life of the new license.*

Pg. 45 – “The Oxbow Bypass is not very conducive to boat angling. Although it lacks attractive areas for camping, the subzone regularly hosts some camping activity. It does offer high-quality and easily accessible bank angling.”

*This used to be very true. However, due to security policies post Sept. 11<sup>th</sup>, this area has been blocked off at the powerhouse. Vehicle access is not possible. Anglers can walk into the site, but it requires a hike of almost one mile. I am certain all use figures displayed in this study are no longer valid.*

Pg. 47 – “Boat angling was lowest in 1995 and 1997. During both of these years, inflows during the early fishing season were unusually high.... High flows and muddy water combined to make Oxbow Reservoir unattractive for angling during much of this period.”

*Is this is an affect caused by project operations? 1997 did receive the highest flows on record, and CORPS requirements for flood control required a 101-foot drawdown by April 30<sup>th</sup>. 1986 (high-flow) and 1988 (low-flow) had 42.5-foot draws. Was Oxbow*

*fishing affected in '86 and '88? In 1995 (med-flow) the flood control draw was less than 30 feet but the remainder of the summer was nearly a 40-foot draw. If fishing was affected both those years, it may indicate IPC water management caused the effect.*

Pg. 52 – “As mentioned earlier, site PDCV is the only site in Zone 3 that is accessible by road. This site is on private land at the southern end of the zone, a short distance downstream of Swede’s Landing. Site PDCV received 2,830 hours of use.”

*This is strong evidence that this private land should be acquired by IPC for public use.*

Pg. 53 – “Bank angling was consistently popular in Hewitt and Holcomb parks during the warm season. The highest total.... occurred in 1994, while the lowest total occurred in 1998. This latter amount represents 26% of the 1994 total.”

*26% of the high is not “consistently popular”.*

Pg. 56 – “The southern half of the Oregon side includes 26 designated sites, ...that provide camping sites and convenient reservoir access. Several of these sites are on private land.... Received a total of 50,416 hours of recreational use... Three of these sites received more than 5,000 hours of use. Hibbards Landing, with the most use, totaled 8,227 hours. It is a large site on private land that is **open to the public** for both day use and camping.”

*This finding indicates a need to acquire private properties for public use. The use hours are very high when compared to IPC and public land sites in the vicinity. “Open to the public” is an interesting choice of words. In a private conversation with the landowner, he told me he had done everything he could to eliminate the public use, but has given up. He doesn’t want to become the “bad guy.” If the private landowner became successful in closing his properties, these displaced users would be forced onto other sites or would no longer come to the area. Public lands are not currently available to accommodate them without resource damage.*

Pg. 58 – “Although hunting contributes only a small proportion of the total, this zone is the only one of the six that receives consistent hunting use, mostly for waterfowl.”

*This is an inaccurate statement. The Snake River area is nationally recognized as an upland game bird hunting area. Chuckar hunting attracts thousands of visitors annually to all three reservoirs. Other upland game birds, deer, and to a lesser degree elk, antelope, and bighorn sheep hunting also contribute to visitation on both sides of the river. If anything, waterfowl contributes the least use. There appears to be an inconsistency between this finding and ODFW and IDFG data.*

Pg. 61 – “Brownlee Reservoir, however, experienced dramatic changes in use that appear to have been caused by both the reduction in crappie angling success and the implementation of severe drawdowns during the peak use season.... Overall warm-season recreational use in the HCC was down 48% between 1994 and 1998.

*This is the primary conclusion of this study. BLM agrees with the conclusion, but it does not identify the project operation effects that have caused the reduction in use. Have operations, drought, or natural cycles caused the crappie population fluctuation? Were the severe drawdowns in response to NMFS requirements only? The drawdowns of Brownlee Reservoir to depths and times beyond what NMFS required would constitute project impacts. In other words, if IPC takes flows below requirements and causes these impacts, what are their license responsibilities to mitigate the impacts to the public for the detrimental consequences caused to the recreation resource?*

### **3. STUDY ADEQUACY**

A roving-intercept survey was used to sample use in six years; 1994, 1995, 1996, 1997, 1998, and 2000. The years that samples were collected were too close together and did not represent a high use period, which can run for a decade depending on angling success. If the same study was conducted between 1981 and 1991, the results would have been dramatically different. There is evidence that recreation use was at least double that which was reported between '94 and '00. Since a new license will cover several decades, which one do we manage for?

The roving-intercept method is statistically sound but may not project data that truly reflects the given situation. Recreating activities that do not stay in one location and/or are not water based are not likely to be sampled, i.e. driving for pleasure and hunting. Public land managers do not intend to manage for the peak time periods, but they do manage toward heavy use periods. This study does separate out week day and week end use, but the sampling effort was via “randomly selected survey periods,” and not directed to the higher end use periods, which possibly contributes to an under reporting of numbers and types of users which would be useful in determining management direction. There appears to be a built in bias.

The study is a collection of data only. It is not a study of project impacts that conclude how IPC's operations affect recreation use. The information provided does not drive the development of PM&Es. It implies that use has been down substantially during the study period and therefore developed facilities exceed demand.

### **4. BLM CONCLUSIONS AND RECOMMENDATIONS**

#### **CONCLUSIONS:**

This study was not conducted during a representative time period nor did it include all the public recreation resources that are impacted by HCC project operations. It did not draw conclusions based on high use or “worse case” periods. It summarized collected data without drawing conclusions based on effects of project operations.

The study was supposed to and should be amended to provide data to answer the following BLM questions/concerns:

1. To what levels are current recreation users stressing the physical and social environment in Hells Canyon?
2. Do conflicts exist involving private vs. public access at dispersed water and land based sites?
3. Determine expansion or enhancement needs for present recreation sites (esp. boating facilities).
4. Define the compatibility between native and non-native fish populations to determine if the needs of recreational anglers and anadromous fisheries can both be accommodated.

#### **RECOMMENDATIONS:**

IPC has identified many PM&Es that address recreation needs (see E.5 Report on Recreational Resources). The following is a summary of questions yet unanswered, and issues that remain unaddressed, that may need additional study information to resolve.

- What operations and maintenance costs are needed for the life of the license on BLM lands? What percentage is IPC responsibility?
- Develop a reservoir management strategy to minimize reservoir water level impacts on recreation and boat launch sites.
- What are the costs to maintain roads accessing reservoir recreation sites to consistent and appropriate standards of safety and convenience? What percentage is IPC responsibility?
- For the next 50 years whitewater recreation activities will not be available on the Snake River above Hells Canyon Dam. That use has theoretically been displaced. Does IPC have any responsibility to fund a percentage of the recreation management of free flowing river programs on the Lower Salmon and Grande Ronde Rivers?
- The Rapid River Hatchery introduces thousands of fish into rivers which attract heavy fishing pressure. There is a need to acquire public access on the Little Salmon River between Rapid River and Salmon to provide access for fishing of releases from Rapid River Hatchery. What is IPC's responsibility?
- Public recreators are consistently using private lands adjacent to the reservoirs. There is a need to acquire, in fee title or easement, the rights of the public to recreate on the following parcels: Holbrook Creek, Sag Road, Swede's, Hibbard Creek, and Cobb Rapids. IPC may be 100% responsible to fulfill this need.
- What are the costs to develop a communications system that serves the needs of all land managers that serve public safety needs? What is IPC's responsibility?
- What are the costs to fund law enforcement personnel and purchase equipment necessary to provide adequate presence? What is IPC's responsibility?
- What are the costs to provide funding for EMTs and ambulance to be located near the reservoirs? What is IPC's responsibility?

- What are the costs to provide appropriate training for search and rescue personnel? What is IPC's responsibility?