CHAPTER III

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

Environmental consequences are the estimated physical, biological, social, and economic effects that would result from implementing each of the alternatives described in Chapter II. This chapter describes the scientific and analytic basis for the comparison of alternatives. The effects of the components of the environment that result from the implementation of alternatives are discussed in terms of their direct and indirect effects as well as the cumulative effect(s) that could potentially occur in the reasonably foreseeable future through the remainder of the planning decade.

Direct And Indirect Effects

Direct and indirect effects occur from management activities and are the consequences expected to occur from implementation of each alternative. Direct effects are caused by the action and occur at the same time and place as the triggering action. Indirect effects are caused by the action and occur later in time or are farther removed in distance from the triggering action.

Cumulative Effects

The cumulative effects are the sum of past actions, the proposed action (direct and indirect effects of each alternative), as well as the effects of activities anticipated in the reasonably foreseeable future.

The analysis and disclosure of cumulative effects is required by the NEPA. It provides informed decisionmakeing and public disclosure. For purposes of this analysis the reasonably foreseeable future is defined as a planning decade through the year 2006.

Effects were analyzed based upon a number of key indicators:

- Capability of visitors to achieve the desired recreational experience: sense of remoteness, level of social encounters
- Capability to provide an appropriate level of visitor management
- Campsite competition
- Capability to provide a diversity of necessary outfitter services to the public
- Change in boat days/launches by outfitter
- Change in total gross revenue by outfitter
- Scheduling flexibility

RECREATION RESOURCES

CAPABILITY OF VISITORS TO ACHIEVE THE DESIRED RECREATION EXPERIENCE: SENSE OF REMOTENESS, SOCIAL ENCOUNTERS

WILD SECTION - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In Alternative A, growth in commercial powerboat use would continue on an unlimited basis. While the number of daily commercial float launches would be restricted during the primary season, the average number of people per party and boats per party could continue to grow to current limitations of 30 people and 30 craft, respectively.

The effects of Alternative A are:

Floatcraft

It allows commercial floaters a maximum party size of 30, a maximum number of boats dependent on party size (up to 30) and the use of kickers in the wild river. Currently, private floaters are allowed a maximum party size of 24 and maximum boats per party of 8, with no use of kickers in the wild river.

The average number of float craft per commercial float trip is anticipated to increase towards the maximum of 30 float craft, due to the increasing popularity of inflatable kayaks, catarafts and commercial row-your-own trips. Additionally, the number of floatcraft per commercial float trip will increase due to the maximum party size of 30. The overall effect of the potential for increased numbers of commercial float craft even with limited growth in numbers of passengers on commercial trips would lessen the sense of remoteness. In addition, commercial floaters use of kickers would continue to reduce the opportunity for solitude or isolation from the sights of sounds of others even among float parties at times when no powerboats were present.

The potential increase in numbers of float craft per party and use of kickers would tend to spread individual parties over longer distances while travelling through the river corridor, increasing the level of and length of encounters with other groups. Increased numbers of commercial float craft would cause congestion at rapids, in narrow stretches of the river and at launch/takeout ramps. Set up and take down times would increase with additional craft per party, adding to congestion at launch/take-out ramps and campsites.

The one-day temporary commercial float permits would continue to add a 6th launch with an additional two boats on weekdays throughout the primary season. The one-day commercial float operators generally travel greater distances than overnight commercial float trip operators and have associated jetboat support services. This use increases the level of encounters in the wild river corridor.

Powerboats

Commercial powerboat use would not be limited as to numbers of boat days or party size except as established by the Coast Guard. Currently, private powerboat use in the wild section is limited to 6 launches per day, and a party size for overnight use of 24.

Commercial powerboat use has historically fluctuated on a daily basis, and, with limited launches by private powerboats, would be primarily responsible for creating peaks in river recreational use. The resulting combined use levels (commercial power and commercial float) would diminish the opportunity to experience a sense of remoteness, especially during periods of peak use.

Continued unlimited commercial powerboat use would also increase the number of multiple encounters, especially in association with trips originating at Hells Canyon Creek and day trips to Rush Creek from downstream portals. Congestion at boat ramps at Hells Canyon Creek and Pittsburg Landing would be expected to increase. There would also be congestion at these sites associated with limited vehicle parking space. However, unlimited commercial powerboat use will provide the maximum opportunity to service those members of the public desiring a commercial powerboat experience.

This alternative would have a low potential to provide the desired recreation experience because of unlimited commercial powerboat use, kickers on commercial float craft and the potential for large growth in the number of commercial float craft. Over time, there would be a reduction in the opportunity for visitors to experience solitude or isolation from the sights and sounds of others. The magnitude and duration of encounters would increase, resulting in many contacts with other users at rapids and access points.

ALTERNATIVE B

In Alternative B, the wild river would be managed for mixed motorized and non-motorized use with maximum commercial powerboat launches representative of the 1988-1992 base period to meet the desired recreation experience. This would include an opportunity for a non-motorized experience on a limited basis between Wild Sheep Rapid and Kirkwood Historic Ranch during Monday through Wednesday each week in July and August.

The effects of Alternative B are:

Floatcraft

Commercial and private floaters would be limited to a maximum party size of 24 and a maximum number of float craft per party of eight, with no use of kickers in the wild river. These limitations would result in less congestion at rapids, in narrow stretches of the river and at launch/take-out ramps.

Each commercial float outfitter per launch group would have access to 3 launch dates during the non-motorized period (one each on Monday, Tuesday and Wednesday). This non-motorized period provides the commercial and private floatboat users a period removed from encounters with motorized users, which represents their desired experience as indicated in the University of Idaho user survey and the scoping for this proposed action. This use occurs on a portion of the wild river for 24 days or 7% of each year. The non-motorized period would enhance the sense of remoteness for floaters and trail users. There would be a greater importance placed on self-reliance by floaters during this time period.

The 6th commercial float launch on weekdays attributed to the two temporary one-day float permits would be eliminated with non-renewal of these permits. This would result in a reduction in encounters associated with jetback support services.

Powerboats

The average amount of use for commercial powerboaters would be comparable to total private powerboat use in the wild river when the average stay lengths per trip for private powerboaters is considered. Private powerboats are limited to six launches per day during the primary season with advance reservations required. Average stay length is three days with no limit on area of operations. Commercial powerboat use would be assigned on a specific daily launch schedule during the primary season in the entire river corridor, with allocations of use based on boat days. This rigid launch schedule would assign a maximum of seven boat days on motorized days and six boat days on non-motorized days. It would also require use of consecutive boat days for overnight trips. Commercial trips would further be limited by area of operations. This would substantially reduce the potential for commercial powerboat use to be the cause of fluctuating levels of total use, thereby reducing the number of peak use days.

Two permits would be available for commercial powerboat service from Hells Canyon Creek at the option of the outfitter, within the amount of powerboat use permitted at this site. This option, if exercised, would create competitive services at the site.

Access to Sheep Creek and Temperance Creek by powerboat is expected to diminish significantly as a result of the end of sheep grazing operations at these two locations. The reduced number of powerboat trips to these locations will decrease encounters with other user groups in this section of the river.

Commercial power day use trips would not be limited by hours of operation, causing a slight reduction in experiencing isolation from the sights and sounds of others during early morning and evening hours.

This alternative would have a high potential to achieve the desired recreation experience because both commercial floatcraft and powerboat use is regulated to moderate peak use days. The non-motorized period contributes to achieving a sense of remoteness for both commercial and private floaters. Few contacts would occur with other users at rapids and access points. Most encounters would be of short duration.

ALTERNATIVE C

In Alternative C, the wild river would be managed for mixed motorized and non-motorized use with maximum commercial powerboat launches representative of the 1988-1992 base period to meet the desired recreation experience. This would include an opportunity for a non-motorized experience on a limited basis between Wild Sheep Rapid and Kirkwood Historic Ranch during Monday through Wednesday every other week in June, July and August.

The effects of Alternative C are:

Floatboats

Commercial and private floaters would be limited to a maximum party size of 24 and a maximum number of float craft per party of eight, with no use of kickers in the wild river. These limitations would result in less congestion at rapids, in narrow stretches of the river and at launch/take-out ramps.

The non-motorized period would be spread throughout the summer providing floaters a longer season in which to schedule their trip. This non-motorized period is also designed to reduce effects to powerboaters by not concentrating the period in a two month period of the summer. This use occurs on a portion of the wild river for 21 days for four out of the next ten years and 18 day for six out of the next ten years. The non-motorized period would enhance the sense of remoteness for floaters and trail users. There would be a greater importance placed on self-reliance by floaters during this time period. Commercial floaters would have unequal access to the availability of non-motorized launches within the total commercial float allocation as a result of the 8 day turnaround and the every other week schedule for the non-motorized period. The total number of non-motorized launches for each outfitter would vary from year to year. However, the outfitted public would be provided a variety of commercial services during the non-motorized period.

The two temporary commercial one-day float permits would continue to be offered as temporary use permits only. Launches for these trips would be limited to one per day seven days per week except for non-motorized days. Launches for this use would come from under-utilized capacity within the 5 launches per day as long as unallocated capacity was available. Based on recent trends, it is anticipated that underutilized capacity will be available for the life of this plan. This would provide the opportunity for the continuation of businesses specializing in a one-day float experience but without permanently affecting other floaters' ability to obtain float launches. These two permits would allow the use of only two boats per trip and an alternating day launch schedule, resulting in a reduction in the level of encounters associated with total float boat traffic on the river at one time. However, these trips usually travel longer distances per day than overnight trips and often involve jetboat support services. As a result, the encounters associated with these trips produce an overall negligible effect.

Powerboats

The average amount of use for commercial powerboaters would be comparable to total private powerboat use in the wild river when the average stay lengths per trip for private powerboaters is considered. Private powerboats are limited to six launches per day during the primary season with advance reservations required. Average stay length is three days with no limit on area of operations except during non-motorized periods. Commercial powerboat use would be assigned on a flexible launch schedule during the primary season for the entire river corridor, with allocations of use based on boat days. This flexible launch schedule would allow commercial powerboaters the opportunity to schedule trips to accommodate the bulk of their historic passenger base, which is made up of a transient tourist population which often book trips on short notice. Commercial powerboat allocations would be spread over the entire primary season, with specific numbers of boat days limited to use within specific blocks of time. The flexible schedule would allow an average of seven boats per day between Hells Canyon Creek and Kirkwood, but only 5.5 boats per day between Wild Sheep and Kirkwood. Commercial trips would be further limited by area of operations and would require use of consecutive boat days for overnight trips. These limitations on use, in association with the projection of less than 100% utilization, would improve the opportunity for visitors to obtain commercial powerboat services following historic use patterns. It would also manage numbers of boats to reduce the potential for, and magnitude of, peak use days.

This alternative reallocates a portion of commercial powerboat use occurring in the base period to the area between Hells Canyon Creek and the top of Wild Sheep Rapids. This action will reduce the number of encounters between groups in the more remote sections of the wild river between Wild Sheep Rapid and Rush Creek Rapid.

Two permits would be available for commercial powerboat service from Hells Canyon Creek at the option of the outfitter, within the amount of powerboat use permitted at this site. This option, if excercised, would create competitive services at the site.

Commercial powerboaters would also have a higher level of access in this alternative than in Alternative B into the 4.2 miles of wild river corridor upstream from upper Pittsburg Landing in order to allow visitors access to Kirkwood Historic Ranch. The average number of daily powerboat trips in this section of the river would increase from seven boats per day on motorized days under Alternative B to 10 boats per day. Kirkwood Historic Ranch is a major component of the Cultural ORV and a primary visitor destination in the wild river. Allowing additional commercial motorized access will meet visitor expectations to tour this site. This could diminish the sense of remoteness for other users in the wild river between Upper Pittsburg Landing and Kirkwood Historic Ranch. However, since the majority of this use would be associated with day trips, this effect would be tempered based on the time of day the trips entered and exited this section of the river corridor, the relatively short time period these boats would be travelling in this stretch of river, and the relatively short distances involved, (4.2 wild river miles, 1.1 scenic river miles). This 4.2 mile section represents 13% of the total length of the wild river.

Private powerboats travelling in the section of river between Pittsburg Landing and Kirkwood would be included in the total daily allocation of six launches per day in the wild river. Commercial powerboat access between Pittsburg Landing and Kirkwood would average 10 boats per day with some of those boat days already included in the daily boat day allocation in the wild river upstream from Kirkwood. All commercial launches from scenic river portals could have access to Kirkwood, as well as approximately one boat per day from Hells Canyon Creek (except during non-motorized periods). The average amount of commercial use could be less than 8 boats depending on each day's trip destination (some trips may not be sold into this section of the river).

As a result of expected reductions in powerboat use to Sheep Creek and Temperance Creek associated with the end of grazing operations, four (4) cargo launches would be authorized, except on non-motorized days, and spread througout the primary season, to support the commercial outfitter operation at Sheep Creek. This would reduce powerboat use historically associated with these sites, reducing floatboat and powerboat encounters indirectly enhancing the recreation experience of all visitors by assuring the routine maintenance and upkeep of the historic structures at Sheep Creek, a component of the cultural ORV. A limited number of boat days (4) to support lodge operations at Sheep Creek, spread over the entire primary season, will produce a negligible increase in sights and sounds of others and levels of encounters.

This alternative would have a high potential to meet the desired recreation experience in the wild river corridor from Hells Canyon Creek to Kirkwood Historic Ranch and a moderate potential from Kirkwood Historic Ranch to upper Pittsburg Landing. The non-motorized period contributes to achieving a sense of remoteness for commercial and private floaters.

While the number of encounters may fluctuate slightly day to day due to the flexible launch schedule for commercial powerboats, this fluctuation is expected to meet the objective to minimize the effects of peak use because demand for commercial powerboat trips is a fairly steady daily market throughout the primary season. Peak use will be managed through specific use allocations for all river users. Encounters with other users at rapids and access points will be significantly reduced. Most encounters would be of short duration.

SCENIC SECTION - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In Alternative A, both commercial powerboat and floatboat use would continue without regulation. The average number of floatboat people per party and boats per party could continue to grow to current limitations of 30 people and 30 craft, respectively.

The effects of Alternative A are:

Floatcraft

Alternative A allows commercial floaters a maximum party size of 30, and a maximum number of boats dependent on party size (up to 30). Currently, private floaters are allowed a maximum party size of 24 and maximum boats per party of 8.

The average number of float craft per commercial float trip is anticipated to increase towards the maximum of 30 float craftdue to the increasing popularity of inflatable kayaks, catarafts and commercial row-your-own trips, as well as the ability to increase the average number of passengers per trip up to a maximum party size of 30. This effect would be most noticeable below the mouth of the Salmon due to Lower Salmon commercial floaters.

The overall effect of the potential for increased numbers of commercial float craft below the mouth of the Salmon, even with limited growth in numbers of passengers on commercial trips, would lessen the sense of remoteness. Increased commercial floating could occur from trips launched at Hells Canyon Creek that continue into this section of the scenic river and from additional launches at Pittsburg Landing and Dug Bar. In addition, kickers are allowed in the scenic river and are frequently used by commercial floaters, reducing the opportunity for solitude or isolation from the sights of sounds of others even among float parties at times when no powerboats were present.

Powerboats

Commercial powerboat use would not be limited as to numbers of boat days. Currently, private powerboat use in the scenic section of the river is limited to 23 boats per day on weekends (Friday through Sunday) and 8 boats per day on weekdays (Monday through Thursday) during the primary season.

Commercial powerboat use has historically fluctuated on a daily basis and, coupled with row-your-own commercial float trips from the Lower Salmon, would create substantial peaks in river recreational use. While most commercial powerboat use below the mouth of the Salmon is short term, pass through traffic upstream from Cache Creek, the Lower Salmon commercial float operators spend a substantially longer period of time traversing this section of river, or create additional commercial powerboat traffic by contracting for jetback/jetout services with commercial powerboaters. The resulting combined use levels (commercial power and commercial float) would diminish the opportunity to experience a sense of remoteness, especially during periods of peak use.

This alternative would have a low potential for achieving the desired recreation experience. The use levels associated with this alternative, especially relative to row-your-own Lower Salmon commercial float use, would create a reduction in the opportunity for a moderate expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others at a level appropriate for a scenic river setting. The magnitude and duration of encounters would increase, resulting in many contacts with other users at rapids and access points.

ALTERNATIVE B

In Alternative B, commercial powerboat use would be regulated on a limited daily use allocation. No commercial floatboat use could be originated within the scenic section of the river in the primary season. Commercial float use would be limited to a maximum party size of 24 and a maximum number of floatcraft per party of eight.

The effects of Alternative B are:

Floatcraft

Commercial and private floaters would be allowed a maximum party size of 24 and maximum boats per party of eight.

Special conditions of use for Lower Salmon commercial floaters to meet Snake River guidelines would be implemented in 1997.

Powerboats

Commercial powerboat use would be limited to 8 boats per day during the primary season.

The temporary use commercial powerboat permit would not be renewed upon expiration at the end of 1996. This would reduce the total amount of commercial powerboat use that took place in the scenic river during the base period of 1988-1992, improving the quality of the recreation experience by reducing the number of encounters.

Due to the higher levels of private powerboat use allowed on weekends as compared to weekdays, there would be more opportunities for encounters between parties on the weekends.

This alternative would have a moderate potential of achieving the desired recreation experience due to the increased levels of powerboat use on weekends during the primary season. There would be a higher expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others on weekdays, and a lower expectation on weekends, but still at a level appropriate to a scenic river setting. There would be some contacts with other users at rapids and access points. The number and duration of contacts would vary from short to moderate duration, but at a level acceptable for a scenic river.

ALTERNATIVE C

In Alternative C, commercial powerboat use would be regulated on a flexible schedule. No commercial floatboat use could be originated within the scenic section of the river in the primary season. Commercial float use would be limited to a maximum party size of 24 and a maximum number of floatcraft per party of eight.

The effects of Alternative C are:

Floatcraft

Commercial and private floaters would be allowed a maximum party size of 24 and maximum boats per party of eight.

Special conditions of use for Lower Salmon commercial floaters to meet Snake River guidelines would be implemented in 1997.

Powerboats

Commercial powerboat use would be assigned on a flexible launch schedule during the primary season for the entire river corridor, with allocations of use based on boat days. This flexible launch schedule would allow commercial powerboaters the opportunity to schedule trips to accommodate the bulk of their historic passenger base, which is made up of a transient tourist population which often books trips on short notice. Commercial powerboat allocations would be spread over the entire primary season, with specific numbers of boat days limited to use within specific blocks of time. These limitations on use, in association with the projection of less than 100% utilization, would improve the opportunity for visitors to obtain commercial powerboat services following historic use patterns. It would also manage numbers of boats to reduce the potential for, and magnitude of, peak use days.

Commercial powerboat use would average 8.8 boats per day between the north boundary of the HCNRA and Pittsburg Landing (38.9 miles), and 9.8 boats per day between Pittsburg Landing and upper Pittsburg Landing (1.4 miles). The increase from 8 boats per day under Alternative B to 8.8 boats per day in Alternative C is a result of increasing the area of operations for the 88 Special boat days to include the entire scenic section of the river. As a result of the flexible launch schedule, there would be some daily variation in this average level, but within levels that would not significantly effect the sense of remoteness for other users in a scenic river setting.

The temporary use commercial powerboat permit would not be renewed upon expiration at the end of 1996. The reduction in use levels and associated encounters attributed to this business that occurred during the base period would partially offset the effect of increasing the area of operations for the 88 "Special" boat days.

A limited number of boat days (16) to support lodge operations at Copper Creek, spread throughout the primary season (the equivalent of one per week), would produce a negligible effect on the recreation experience of other users and would be limited to traveling on Monday through Thursday only. The area of the scenic river upstream from Copper Creek would not be affected.

A limited number of boat days (4) to support lodge operations at Sheep Creek in the wild river that would travel through the scenic river (the equivalent of one per month during the primary season) would have a negligible effect on the recreation experience of other users.

The average amount of use for commercial powerboaters, even with a flexible launch schedule, is substantially lower than total private powerboat use in the scenic river on weekdays and weekends. While the number of encounters may fluctuate slightly day to day due to the flexible launch schedule for commercial powerboats, this fluctuation is expected to meet the objectives to minimize the effects of peak use because demand for commercial powerboat trips is a fairly steady daily market throughout the primary season. Peak use will be managed through specific use allocations for all river users.

This alternative would have a moderate potential of achieving the desired recreation experience due to the increased levels of powerboat use on weekends during the primary season. There would be a higher expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others on weekdays, and a lower expectation on weekends, but still at a level appropriate to a scenic river setting. There would be some contacts with other users at rapids and access points. The number and duration of contacts would vary from short to moderate duration, but at a level acceptable for a scenic river.

PROVIDING FOR THE APPROPRIATE LEVEL OF VISITOR MANAGEMENT

WILD RIVER - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In Alternative A, commercial powerboat use would be unlimited and commercial float use would be limited but able to grow toward maximum numbers of launches and party size.

Unlimited commercial powerboat use and the ability for commercial float use to grow within the daily launch allocation while increasing the number of boats per party, including the 6th launch on weekdays for commercial one-day float trips, will continue to increase river traffic, create resource impacts at campsites, create conflict over campsites and impact the opportunity to experience a high degree of challenge and risk for private users. Regimentation of visitors or scheduling of stops at specific sites such as Kirkwood may be necessary due to lack of shoreline access brought about by increased commercial use.

This alternative would have a low potential to meet visitor management objectives. It minimizes the outdoor setting for self-reliance through application of outdoor skills, a perception of a high degree of challenge and risk, or subtle visitor management controls or regulations.

ALTERNATIVE B

In Alternative B, the river would be managed for a variety of experiences for commercial motorized and commercial non-motorized use including a limited opportunity for a non-motorized experience between Wild Sheep Rapid and Kirkwood.

The regulation and scheduling of commercial powerboat and floatboat use will make commercial use predictable; thereby, lessening the competition for campsites and reducing on-river visitor conflicts. These effects are anticipated as a result of requiring a rigid launch schedule for both powerboat and floatboat commercial users, limiting the commercial float party size and number of floatcraft per party, eliminating the one-day temporary float permits (and need for jetbacks). Management personnel and law enforcement are less necessary in this alternative in comparison to Alternative A because of the reduced visitor conflicts associated with lessening congestion at campsites, at rapids, launch and take-out ramps, and other popular sites. This alternative will also result in less need for regimentation of visitors and on-site controls because overall use and peak use is managed to reduce user conflicts.

This alternative would have a high potential to meet visitor management objectives. It would provide the appropriate experience setting that would require a great deal of self-reliance through application of outdoor skills for commercial floaters and powerboaters in a shared use setting.

ALTERNATIVE C

In Alternative C, the river would be managed for a variety of experiences for commercial motorized and commercial non-motorized use including a limited opportunity for a non-motorized experience between Wild Sheep Rapid and Kirkwood.

Alternative C has similar effects to Alternative B. It, however, manages commercial powerboat use with a flexible launch schedule. This approach will not result in as predictable of a pattern of commercial use as under Alternative B; however, demand for commercial powerboat trips is a fairly steady daily market throughout the primary season. Alternative C also differs from Alternative B in that the one-day temporary commercial float trips remain and there is a higher level of commercial powerboat use allocated between Pittsburg Landing and Kirkwood Historic Ranch and between Hells Canyon Creek and Wild Sheep Rapid. The retention of the temporary commercial float trips and the higher level of commercial use between Pittsburg Landing and Kirkwood Historic Ranch would slightly increase the number of powerboat/floatboat encounters with the associated potential for user conflicts. Conversely, reallocating commercial powerboat use to a higher level between Hells Canyon Creek and Wild Sheep Rapids will reduce the number of jetboat/floatboat encounters and provide a higher level of challenge and risk in the more remote sections of the wild river between Wild Sheep Rapid and Kirkwood on motorized days.

This alternative would have a high potential to meet visitor management objectives. For the majority of the wild river, it would provide the appropriate experience setting that would require a great deal of self-reliance through application of outdoor skills for commercial floaters and powerboaters in a shared use setting.

SCENIC RIVER - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

Under this alternative, unlimited commercial powerboat use would be allowed to increase above existing use levels. Increased commercial floating could occur as a result of a higher number of Hells Canyon Creek launches continuing into this section of the river, and from unlimited launches at Pittsburg, Dug Bar and the lower Salmon River. Commercial float use would be limited to maximum numbers of boats per party and party size.

The opportunity to experience a moderate degree of challenge and risk associated with a scenic river trip would be diminished in the absence of adequate management of commercial uses. Unlimited commercial powerboat and commercial float use will continue to increase river traffic, create resource impacts at campsites, create conflict over campsites and impact the opportunity to experience a high degree of challenge and risk for private users.

This alternative would have a low potential to meet visitor management objectives. Increasing levels of commercial use and increases in the number of days of peak use would not provide the appropriate experience setting. As a result, there would be less dependence on self-reliance through application of outdoor skills and a reduced perception of a moderate degree of challenge and risk. Visitor management controls or regulations would increase.

ALTERNATIVE B

In this alternative, commercial use levels would be established that would protect the ORV's within the river corridor including the experience of the visitor.

The regulation and scheduling of commercial powerboat and floatboat use will make commercial use predictable; thereby, lessening the competition for campsites and reducing on-river visitor conflicts. These effects are anticipated as a result of requiring a rigid launch schedule for both powerboat and floatboat commercial users, limiting the commercial float party size and number of floatcraft per party, eliminating the one-day temporary float permits (and need for jetbacks), and eliminating the temporary power permit. Management personnel and law enforcement are less necessary in this alternative in comparison to Alternative A because of the reduced visitor conflicts associated with lessening congestion at campsites, at rapids, launch and take-out ramps, and other popular sites. This alternative will also result in less need for regimentation of visitors and on-site controls because overall use and peak use is managed to reduce user conflicts.

This alternative would have a high potential to meet visitor management objectives. The alternative would provide the appropriate experience setting that would require self-reliance through application of outdoor skills in an environment that offered a moderate degree of challenge and risk.

ALTERNATIVE C

In this alternative, commercial use levels would be established that would protect the ORV's within the river corridor including the experience of the visitor.

Alternative C has similar effects to Alternative B. It, however, manages commercial powerboat use with a flexible launch schedule. This approach will not result in as predictable of a pattern of commercial use as under Alternative B; however, demand for commercial powerboat trips is a fairly steady daily market throughout the primary season. Alternative C also differs from Alternative B in that there is a limited number of boat days provided to support lodge operations at Copper Creek (16) and Sheep Creek (4). However, the potential for additional powerboat and floatboat encounters and possible visitor conflict is negligible.

This alternative would have a high potential to meet visitor management objectives. The alternative would provide the appropriate experience setting that would require self-reliance through application of outdoor skills in an environment that offered a moderate degree of challenge and risk.

REDUCING CAMPSITE COMPETITION

Several assumptions were made in this analysis as follows:

- Campsite competition would be at an acceptable level in the scenic river for alternatives that provided for specific limits on the number of users during the primary season (Alternatives B and C). Alternative A would result in level of competition for campsites that would not meet recreation objectives without instituting a campsite reservation system.

- Campsite competition and associated campsite stay lengths would be at an acceptable level in the secondary season throughout the entire wild and scenic river corridor.

- Campsite competition in regard to drop camps would be controlled as a component of commercial powerboat access limitations for all alternatives that had specific limits on powerboat use.

- Campsite competition between river users and trail users would be minimal due to the different seasons of use as a result of extremes in temperature in the canyon during the summer months that discourage trail use during the time periods of highest demand for river use.

- A campsite reservation system would not fully resolve all issues concerning campsite competition because a reservation system diminishes the self-reliance component of a semi-primitive or primitive experience. Individuals that are not familiar with the river may float past their assigned campsite. Inclement weather may force people to stay in a campsite longer than it is reserved for them. All of these situations can lead to conflict over campsites between users.

- The recreation experience of river users could be enhanced by reducing campsite competition.

For the purposes of this analysis, campsite competition is measured subjectively in terms of high, moderate, or low potential for each alternative to reduce competition for campsites as a means of enhancing the camping experience associated with travel in the Wild River corridor in the primary season.

WILD SECTION - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In Alternative A, the wild section would continue to be managed for unlimited commercial powerboat use and limited commercial float use. Campsites would continue to be available on a first-come, first-served basis, but there would be a management option to implement campsite reservations if mitigation measures failed to resolve high levels of competition.

Previously established controls, including limits on private powerboat use, requirements for a limit of 5 launches per day in the entire wild river corridor for all float trips, and changes in campsite stay limits in the primary season would significantly reduce the overall competition for campsites. However, continued unlimited commercial powerboat use, with an increase in overnight trips by commercial powerboaters, could create increased levels of competition for campsites. Implementation of the campsite reservation system would occur at a faster rate if mitigation measures did not resolve the competition problems.

The ability to have larger party sizes on commercial float trips would require competing for larger campsites. The use of kickers by commercial floaters would continue to provide an advantage over private floaters (who cannot use kickers in the wild river) in securing campsites.

Drop camps are allowed in the primary season if transported by commercial outfitters, subject to campsite stay lengths. This would provide an additional user group that would be competing for campsites.

This alternative would have a high potential to reduce campsite competition but the implementation of campsite reservations would occur sooner than with other alternatives due to unlimited commercial powerboat use and the associated potential for an increase in overnight trips by commercial powerboaters.

ALTERNATIVE B

In Alternative B, commercial motorized and commercial non-motorized use would be managed in a mixed use setting for a variety of recreation experiences. There would be a limited opportunity for a non-motorized experience on Monday through Wednesday from the second Monday of July through the Wednesday prior to Labor Day between Wild Sheep Rapid and Kirkwood.

This alternative would have a high potential to reduce campsite competition. It would initially continue a first-come, first-served system for obtaining campsites. Use levels would be monitored and if monitoring indicated that levels of mixed use were creating high levels of campsite competition, a series of other actions would be implemented over time to resolve campsite competition. If the level of campsite competition remained at a high level after all mitigation measures were used, a campsite reservation system would be implemented.

ALTERNATIVE C

In Alternative C, commercial motorized and commercial non-motorized use would be managed in a mixed use setting for a variety of recreation experiences. There would be a limited opportunity for a non-motorized experience on Monday through Wednesday on alternating weeks starting the first Monday in June and running through August. During the 10-year planning period, there would be six years with six, three-day non-motorized periods spread through the primary season and four years with seven, three-day non-motorized periods, an average of 19 non-motorized days per year.

With the following exceptions, the effects of Alternative C would be equivalent to Alternative B.

There would be no overnight camping by commercial powerboats between Pittsburg Landing and Kirkwood Historic Ranch (inclusive), and between Hells Canyon Creek and Wild Sheep Rapid (inclusive), during the primary season. This would be a mitigation measure in response to commercial powerboat use levels in these sections of the wild river and to reduce competition for campsites in these sections of the river. Private land at Kirby Creek would be exempt from this requirement.

This alternative would have a high potential to reduce campsite competition. It would initially continue a first-come, first-served system for obtaining campsites. Use levels would be monitored and if monitoring indicated that levels of mixed use were creating high levels of campsite competition, a series of other actions would be implemented over time to resolve campsite competition. If the level of campsite competition remained at a high level after all mitigation measures were used, a campsite reservation system would be implemented.

CAPABILITY TO PROVIDE A DIVERSITY OF NECESSARY OUTFITTER SERVICES TO THE PUBLIC

The diversity of outfitted experience is measured objectively by total launches per portal. In addition to this measure, diversity of outfitted experience is also measured subjectively in terms of high, moderate, or low capability of each alternative to provide a diversity of outfitter services to the public.

WILD SECTION - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In alternative A, commercial powerboat use would be unlimited and commercial float use would be limited but able to grow toward maximum numbers of launches and party size.

Powerboat businesses would be able to continue to expand their businesses yearround based on user demand and the individual marketing capability of each outfitter. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. The ability to serve walk-in, short notice transient tourists would be limited only by the availability of the outfitters to provide boats. Outfitters would be able to service large groups. All outfitters with priority use permits would be able to expand their business into the full length of the wild river corridor, with associated changes in the types of trips offered including overnight camping. Trip length would be limited only by stay lengths at individual campsites. There would be no upper limit on the length of commercial powerboats. Individual business growth would be limited only by each individual outfitter's business goals and financial capability, resulting in variations in sizes of businesses and their associated specialized services.

There would be no designated maximum or minimum number of powerboat businesses at portals for visitors. The businesses operating from Cache Creek and Pittsburg Landing could be bought and sold, with movement of entire businesses from one portal to another. Individual outfitters could acquire multiple businesses and their associated permits, creating the potential for monopolies at some portals. Outfitters could operate out of multiple portals, increasing the amount of competition at some locations, particularly at Pittsburg Landing. Movement of businesses away from sites would reduce options for visitor services. Monopolies at portals could reduce the quality of services to visitors, including the lack of competition associated with options in trip packages.

The business at Hells Canyon Creek would continue to be limited to 2 boats in the water, but with unlimited trips per day using the 2 boats. A second permit could be issued to operate from this site, limited to 1 boat in the water, but with unlimited trips per day using the single boat. These two businesses would be the only powerboat businesses that could originate passengers above Wild Sheep Rapid.

Commercial powerboats would be able to launch inflatable watercraft, subject to the float party having a valid float permit, yearround. Jetback and jetout service would be available for floaters.

Two, one-day commercial float permits would be issued for conducting one-day trips between Hells Canyon Creek and Pittsburg Landing, limited to one per day on Monday through Friday only with a maximum of two boats per trip. This opportunity would require a sixth launch to accomodate this use.

A maximum of 16 special use permits for multi-day commercial floating could be issued, with an initial allocation of 2 commercial launches per day. The 16th commercial launch would be set aside as a pool of dates available for use by all float outfitters. Each trip would be limited to a maximum of 30 people, with no limit on the number of boats. During the secondary season there would be no limit on party size or number of daily launches. Commercial floaters could use kickers on rafts to shorten the duration of trips on the river. There would be no opportunity to provide a non-motorized experience to customers.

A Granger-Thye permit would be issued to occupy the facilities at Sheep Creek to provide the opportunity for overnight use in association with outfitted trips.

Total commercial powerboat launches per portal that could enter the wild river:

Hells Canyon Creek - Limited to 3 boats at this portal (2 permits, one not currently issued) in the water, with unlimited launches per day using the 3 boats

Pittsburg Landing -- Unlimited launches

Cache Creek ------- Unlimited launches
WILD RIVER TOTAL Unlimited

This alternative would have a moderate capability of providing a diverse outfitted experience by offering a variety of outfitted services. Variables associated with unlimited commercial powerboat use and associated business decisions concerning selling, purchasing and moving businesses could change the mix of commercial opportunities at different portals. The potential for monopolies at sites may be detrimental in regard to the availability of quality services and competitive prices for visitors.

ALTERNATIVE B

In Alternative B, permits would be managed to provide a variety of services for commercial motorized and commercial non-motorized customers including a limited opportunity for a non-motorized experience between Wild Sheep Rapid and Kirkwood Historic Ranch.

During the primary season, commercial powerboat use would be assigned as boat days on a rigid launch schedule. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. The ability to serve walk-in, short notice transient tourists would be extremely limited, based on the availability of each outfitter to have an assigned launch date on any given day. Marketing of trips would be more dependent on pre-scheduling of trips by visitors, which would be a departure from a large component of their historic customer base. Outfitters may have difficulty servicing large tour groups associated with bus tours due to lack of adequate boat days to accommodate a trip on a particular day.

Powerboat outfitters would be limited to their historic area of operation year round in the wild river corridor, and further limited in trip duration (day use or overnight) depending on their historic use. Trip lengths would be limited by the need to use consecutive boat days on overnight trips, if that type of use was authorized and by stay lengths at individual campsites. There would be an upper limit on the length of commercial powerboats of 39.6 feet. The ability of visitors to obtain outfitted services in the primary season would be dependent on the total number of boat days available, if the available boat days coincided with their schedule and whether or not there was room on the boat. Scheduling a trip on short notice could be difficult.

There would be maximum and minimum numbers of powerboat businesses based at portals to assure that services would always be available at portals for visitors. This would assure that, if businesses were bought and sold, there would continue to be outfitter services at all portals that could provide access into the wild river. Individual outfitters would be limited in their ability to acquire multiple businesses and their associated permits, reducing the potential for the creation of monopolies in prices and services to visitors. Outfitters could not operate out of multiple portals, maintaining a diverse customer base for outfitters to compete for at each portal.

The business at Hells Canyon Creek would continue to be limited to 2 boats in the water and a maximum of two trips per day. There would be no additional permits issued for this site with the exception that, at the option of the outfitter, the existing business could be equally divided, with two permits issued with a maximum of one boat and one trip per day for each permit. This would provide the potential for a second business owner at the site in the future, with choices for visitors in services and prices. Whether one or two businesses operated from this site, they would be the only powerboat businesses that could originate passengers above Wild Sheep Rapid.

Commercial powerboats would not be able to launch inflatable watercraft. Jetback and jetout service would be available for floaters subject to availability of powerboat launches within the rigid boat day schedule. This would probably result in a reduction in the availability of this type of service to floaters.

The opportunity for visitors to travel by commercial powerboat to Kirkwood Historic Ranch would be reduced when compared to the historic base period use.

The two, one-day temporary use commercial float permits for conducting one-day trips between Hells Canyon Creek and Pittsburg Landing would not be reissued upon their expiration in 1996. While this type of use would remain available as an option for multi-day float outfitters to provide, the opportunity for visitors to experience this type of trip would probably be reduced.

A maximum of 14 and a minimum of 10 special use permits for commercial floating could be issued, with an initial allocation of 2 commercial launches per day. Six additional launches would be set aside as pool dates available for use by all float outfitters, with 8 launches from the commercial pool being allocated to private floaters. Each trip would be limited to a maximum of 24 people and a maximum of 8 float craft per party year-round Commercial floaters could not use kickers on rafts. There would be an opportunity to provide a non-motorized experience to customers on Monday through Wednesday each week from July through August, for a maximum of 24 days per primary season.

A Granger-Thye permit would be issued to occupy the facilities at Sheep Creek to provide the opportunity for overnight use in association with outfitted trips. However, the ability of outfitters to access the site due to the rigid launch schedule and non-motorized days may not make the site attractive enough for commercial outfitters to bid on. As a result, the opportunity for the outfitted public to use this location for overnight lodging in association with outfitted trips may end.

Total commercial powerboat launches (boat days) per portal that could enter the wild river:

Hells Canyon Creek - 224 boat days - limited to 2 boats in the water, with a maximum of 2 trips per day (136 of the 224 boat days limited to Wild Sheep)

Pittsburg Landing -- 119 boat days - 88 of the 119 limited to Kirkwood only (special allocation). A portion of the remaining boatdays limited to Kirkwood only based on the rigid launch schedule. Approx. 8 of the remaining 31 boat days limited to Kirkwood only due to rigid schedule.

Cache Creek -------- 448 boat days - a maximum of 4 boats/day. 96 of the 448 limited to Kirkwood only.

WILD RIVER TOTAL 791 boat days - 136 limited to Wild Sheep, approx. 192 limited to Kirkwood, 463 entire wild river within individual outfitter's area of operation.

This alternative would have a moderate capability of providing a diverse outfitted experience by offering a variety of outfitted services. Variables associated with the rigid boat day schedule for commercial powerboats would affect the ability to reach particular destinations without booking well In advance or travelling to a different portal for an available launch date or destination. Powerboat outfitters would be limited in areas of operation year-round, limiting their ability to expand their trips in the secondary season. The elimination of the one-day float permits and the projected reduction in jetback/jetout service would substantially reduce the opportunity for these types of outfitted experiences, but the opportunity would remain available and dependent on the type of services individual powerboat outfitters decided to provide.

ALTERNATIVE C

In Alternative C, permits would be managed to provide a variety of services for commercial motorized and commercial non-motorized customers including a limited opportunity for a non-motorized experience between Wild Sheep Rapid and Kirkwood Historic Ranch.

During the primary season, commercial powerboat use would be assigned as boat days on a flexible launch schedule. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. Walk-in, short notice transient tourists could be accommodated, based on the ability of each outfitter to have the flexibility to move boat days within specific blocks of time. Marketing of trips would not be as dependent on pre-scheduling of trips by visitors as in Alternative B, except for overnight trips which is not a departure from the norm. Compared to Alternative B, outfitters could more easily accommodate pre-scheduled, large groups due to flexibility to use the number of boats that will accommodate the size of the trip as long as an adequate number of boat days within each outfitters' allocation remain available within a specific block of time.

Powerboat outfitters would be have the flexibility to schedule three day fishing trips that would avoid non-motorized periods in the wild river. Trips could be scheduled on a customized basis for visitors to coincide with prime fishing seasons or to meet customers' schedules within the outfitter's allocation of boat days within different sections of the wild river.

Powerboat outfitters would be limited to their historic area of operation during the primary season only. They would be limited in trip duration (day use or overnight) depending on their historic use, but outfitters that were not allowed to camp overnight would have the option of obtaining overnight services at an outfitter lodge. Trip lengths would be limited by the need to use consecutive boat days on overnight trips. There would be an upper limit on the length of commercial powerboats of 42 feet which would expand seating capacity on new boats as compared to Alternative B. Scheduling a trip on short notice would be dependent on availability of a trip by a particular outfitter, and the total boat day allocation of the outfitter within a specific block of time (based on historic use levels).

Outfitters could only operate out of (launch boats) multiple portals based upon historic use.

The business at Hells Canyon Creek would continue to be limited to 2 boats in the water, but the number of daily trips would be limited based on revised use. There would be no additional permits issued for this site with the exception that, at the option of the outfitter, the existing business could be equally divided, with two permits issued with a maximum of one boat for each permit. This would provide the potential for a second business owner at the site in the future, with choices for visitors in services and prices. Whether one or two businesses operated from this site, they would be the only powerboat businesses that could originate passengers above Wild Sheep Rapid.

Commercial powerboats would be able to launch inflatable watercraft, subject to the float party having a valid float permit, year-round. Jetback and jetout service would be available for floaters, but the opportunity for this type of service would be dependent on the number of powerboat outfitters who would choose to provide this service in lieu of, or in combination with conducting jet boat tours and fishing trips.

The opportunity for visitors to travel by commercial powerboat to Kirkwood Historic Ranch would be comparable to the historic base period. The entire allocation of boat days for powerboat outfitters that originated their trips from Pittsburg Landing and Cache Creek would allow travel to Kirkwood Historic Ranch.

The two, one-day commercial float permits for conducting one-day trips between Hells Canyon Creek and Pittsburg Landing would be renewed on an annual basis with temporary use only. They would be limited to one trip per day on an alternating schedule as dates were available, 7 days per week with a maximum of 2 boats per trip and a maximum party size of 24. These trips would be dependent on the availability of excess, underutilized launches from within the 5 launch per day limit for float use. The one-day float trip opportunity would also remain available as an option for multi-day float outfitters to provide.

A maximum of 14 and a minimum of 10 special use permits for multi-day commercial floating could be issued, with an initial allocation of 2 commercial launches per day. Six additional launches would be set aside as pool dates available for use by all float outfitters, with 8 launches from the commercial pool being allocated to private floaters. Each trip would be limited to a maximum of 24 people and a maximum of 8 float craft per party year-round. Commercial floaters could not use kickers on rafts. There would be an opportunity to provide a non-motorized experience to customers on Monday through Wednesday every other week from June through August, for an average of 19 days per primary season.

A Granger-Thye permit would be issued to occupy the facilities at Sheep Creek to provide the opportunity for overnight use in associated with outfitted trips. The holder of this permit would have up to 25 allocated boat days changed from a limited wild river launch to launches that would cover the outfitter's entire area of operation during the term of the Granger-Thye permit. This will provide the opportunity for overnight use in association with outfitted trips. In addition, a maximum of 4 boat days would be assigned to this Granger-Thye permit to provide cargo trips to support the continuation of this commercial overnight opportunity for visitors. The cargo trips would not count against the cap on commercial passenger boat days.

Total commercial powerboat launches (boat days) per portal that could enter the wild river:

Hells Canyon Creek - 397 boat days - limited to 2 boats in the water at one time, with daily trips limited by total allocation of boat days per block of time; 283 of the 397 boat days limited to Wild Sheep only.

Pittsburg Landing -- 80 boat days - 54 of the 80 boat days limited (north boundary to Kirkwood only).

Cache Creek -------- 904 boat days - 556 of the 904 boat days limited to Kirkwood only

WILD RIVER TOTAL 1,381 boat days - 283 limited to Wild Sheep, 610 limited to Kirkwood, 488 entire Wild River within area of operation for each outfitter. (Sheep Creek access would change these totals to 585 limited to Kirkwood, 513* entire wild river.)

This alternative would have a high capability of providing a diverse outfitted experience by offering a variety of outfitted services. The flexible boat day schedule for commercial powerboats would generally allow visitors to reach particular destinations without advance bookings or the need to travel to a different portal for an available launch date or destination. Powerboat outfitters would be limited in areas of operation only during the primary season, allowing them to expand their operations in the secondary season. One-day float permits would be included in the mix of use without relying on multi-day permit holders to provide all of this service, and utilize excess launches that were previously lost opportunities for float trips. The non-motorized experience would be available to visitors throughout the primary season, providing a variety of river and weather conditions as part of the experience. The continuation of outfitted services at Sheep Creek would provide an overnight opportunity for visitors.

SCENIC SECTION - DIRECT AND INDIRECT EFFECTS

ALTERNATIVE A

In Alternative A, commercial powerboat use would be unlimited and commercial float use would be unlimited for launches originating in the scenic river and those entering the scenic river that originated in the wild river. Commercial float use would be limited in party size.

Powerboat businesses would be able to continue to expand their businesses year-round based on user demand and the individual marketing capability of each outfitter. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. The ability to serve walk-in, short notice transient tourists would be limited only by the availability of the outfitters to provide boats. Outfitters would be able to service large groups. All outfitters would be able to expand their business into the full length of the scenic river corridor, with associated changes in the types of trips offered including overnight camping. Trip length would be limited only by stay lengths at individual campsites. There would be no upper limit on the length of commercial powerboats. Individual business growth would be limited only by each individual outfitter's business goals and financial capability, resulting in variations in sizes of businesses and their associated specialized services.

There would be no maximum or minimum number of powerboat businesses based at portals to assure that services would always be available at all portals for visitors. The businesses operating from Cache Creek and Pittsburg Landing could be bought and sold, with movement of entire businesses from one portal to another. Individual outfitters could acquire multiple businesses and their associated permits, creating the potential for monopolies at some portals. Outfitters could operate out of multiple portals, increasing the amount of competition at some locations. Movement of businesses away from sites would reduce options for visitor services. Monopolies at portals could reduce the quality of services to visitors, including the lack of competition and the associated lack of options in trip packages and prices.

A second permit could be issued to operate commercial trips from Hells Canyon Creek, limited to 1 boat in the water, but with the potential of introducing additional commercial services into the scenic river year-round. The temporary use commercial powerboat permit authorizing use in the scenic river only, would be renewed on an annual basis, providing additional commercial opportunities for visitors.

Commercial powerboats would be able to launch inflatable watercraft, subject to the float party having a valid permit, year-round. Jetback and jetout service would be available for floaters.

The commercial float launches originating in the wild river could continue their trips into the scenic river subject to the maximum allocation of launches that could originate at Hells Canyon Creek during the primary season. In addition, each of the commercial float outfitters could launch unlimited numbers of trips from scenic river portals, introducing a new opportunity for customers, but adding considerable congestion at the launch ramps and on the river, which may negatively affect the quality of the service. Each trip, regardless of point of origin, would be limited to a maximum of 30 people, with no limit on the number of boats. Commercial floaters could use kickers on rafts to shorten the duration of trips on the scenic river.

The resort at Copper Creek would use cargo boats to transport supplies in support of overnight lodging services for visitors in conjunction with outfitted trips.

Total commercial powerboat launches per portal that could enter the scenic river:

Hells Canyon Creek - Limited to 3 boats in the water, with unlimited launches per day using the 3 boats

Pittsburg Landing -- Unlimited launches

Cache Creek -------- Unlimited launches
SCENIC RIVER TOTAL Unlimited

This alternative would have a low capability of providing a diverse outfitted experience by offering a variety of outfitted services. Variables associated with unlimited commercial powerboat use and unlimited commercial float launches, and associated business decisions concerning selling, purchasing and moving businesses could change the mix of commercial opportunities at different portals and substantially increase the amount of traffic into this area. Congestion on the river and at portals would not be an attractive selling point for commercial trips, and could diminish the quality of the services provided to customers. The potential for monopolies at sites may be detrimental in regard to the availability of quality services and competitive prices for visitors.

ALTERNATIVE B

In Alternative B, permits would be managed to provide a variety of services for commercial motorized and commercial non-motorized customers.

During the primary season, commercial powerboat use would be assigned as boat days on a rigid launch schedule. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. The ability to serve walk-in, short notice transient tourists would be extremely limited, based on the availability of each outfitter to have an assigned launch date on any given day. Marketing of trips would be more dependent on pre-scheduling of trips by visitors, which would be a departure from a large component of their historic customer base. Outfitters may have difficulty servicing large groups due to lack of adequate boat days to accommodate a trip on a particular day.

Powerboat outfitters would be limited to their historic area of operation year round in the wild river corridor, and further limited in trip duration (day use or overnight) depending on their historic use. Trip lengths would be limited by the need to use consecutive boat days on overnight trips (if that type of use was authorized) and by stay lengths at individual campsites. There would be an upper limit on the length of commercial powerboats of 39.6 feet. Limiting boat length would preclude large double-decked boats, reducing potential capacity as compared to Alternative A. The ability of visitors to obtain outfitted services in the primary season would be dependent on the total number of boat days available, if the available boat days coincided with the customer's schedule and whether or not there was seating capacity available on the boat. Scheduling a trip on short notice could be difficult.

There would be maximum and minimum numbers of powerboat businesses based at portals to assure that services would always be available at portals for visitors. This would assure that, if businesses were bought and sold, there would continue to be outfitter services at all scenic river portals that could provide access into the scenic river. Individual outfitters would be limited in their ability to acquire multiple businesses and their associated permits, reducing the potential for the creation of monopolies in prices and services to visitors. Outfitters could not operate out of multiple portals.

The area of operation for the business at Hells Canyon Creek would be limited to operating in the scenic river downstream as far as Pittsburg Landing only, year-round.

Commercial powerboats would not be able to launch inflatable watercraft. Jetback and jetout service would be available for floaters subject to availability of powerboat launches within the rigid boat day schedule. This would probably result in a reduction in the availability of this type of service to floaters.

The opportunity for visitors to travel by commercial powerboat to Cache Creek Ranch as the entry portal would be unlimited for trips originating downstream from Cache Creek.

The temporary use commercial powerboat permit authorizing use in the scenic river only, would not be renewed upon expiration of the permit at the end of the 1996 season. The types of services provided by this outfitter would be provided by other powerboat outfitters.

Each commercial float trip, regardless of point of origin, would be limited to a maximum of 24 people and 8 boats per party year-round. During the secondary season there would be no limit on numbers of launches entering the scenic river, regardless of point of origin. Commercial floaters could use kickers on rafts to shorten the duration of trips on the scenic river year-round.

The resort at Copper Creek would be required to supply cargo to the site within the allocation of boat days for the powerboat business associated with the resort permit. Since some of these trips involved transporting supplies which do not allow hauling of customers (propane), this would reduce the number of boat days allocated to the business for providing outfitter services to customers. As a result, the opportunity for the outfitted public to use this location for overnight lodging in association with outfitted trips would be reduced.

Total commercial powerboat launches (boat days) per portal that could enter the scenic river:

> Hells Canyon Creek - 88 boat days - limited to travel downstream to Pittsburg Landing only (one trip per day maximum on motorized days only in the wild river). This would result in travelling in only 1.4 miles of the scenic river.
>
> Pittsburg Landing -- 119 boat days - 88 of these 119 boat days would be limited to travel upstream to reach Kirkwood, travelling in only 1.4 miles of the scenic river.
>
> Cache Creek -------- 865 boat days - a maximum of 8 boats/day when combined with the allocation of 31 boat days from Pittsburg that are allowed to travel in the entire scenic and study river. 448 of these boat days do not allow access upstream from Pittsburg Landing.
>
> SCENIC RIVER TOTAL 1,191 boat days - 207 limited to 1.4 miles of Scenic River, 896 entire scenic and study river with the exception that 448 are not allowed in 1.4 mile section above Pittsburg Landing. The ramp at Pittsburg is used as a management point dividing wild river and scenic river boat day allocations.

This alternative would have a moderate capability of providing a diverse outfitted experience by offering a variety of outfitted services. Variables associated with the rigid boat day schedule for commercial powerboats would affect the ability to reach particular destinations without booking well in advance or travelling to a different portal for an available launch date or destination, but not as difficult as wild river destinations as a result of a greater number of boat days available in the scenic river. There would be problems associated with the ability to supply boats to support large groups. The outfitter based at Hells Canyon Creek would be limited in area of operation yearround, limiting the ability to expand trips into the scenic river in the secondary season. The lack of support trips to exclusively transport cargo to supply Copper Creek would reduce the availability of this site for overnight use by the outfitted public.

ALTERNATIVE C

In Alternative C, permits would be managed to provide a variety of services for commercial motorized and commercial non-motorized customers.

During the primary season, commercial powerboat use would be assigned as boat days on a flexible launch schedule. The types of trips offered would provide a variety of opportunities, primarily focused on one day tours. The ability to serve walk-in, short notice transient tourists would be easy to accommodate, based on the ability of each outfitter to have the flexibility to move boat days within specific blocks of time. Marketing of trips would not be as dependent on pre-scheduling of trips by visitors, except for overnight trips which is not a departure from the norm. These trips could be scheduled on a customized basis for visitors to coincide with prime fishing seasons or to meet customers' schedules within the outfitter's allocation of boat days. Outfitters could easily accommodate pre-scheduled, large groups due to flexibility to use the number of boats that will accommodate the size of the trip as long as an adequate number of boat days within each outfitters' allocation remain available within a specific block of time.

Powerboat outfitters originating at Pittsburg or Cache Creek would be able to utilize the entire scenic river year-round, and not limited in the scenic river by areas of operation. They would be limited in trip duration (day use or overnight) depending on their historic use, but outfitters that were not allowed to camp overnight would have the option of obtaining overnight services at an outfitter lodge. Trip lengths would be limited by the need to use consecutive boat days on overnight trips. There would be an upper limit on the length of commercial powerboats of 42 feet which would expand seating capacity on new boats as compared to Alternative B. Scheduling a trip on short notice would be dependent on availability of a trip by a particular outfitter, and the total boat day allocation of the outfitter within a specific block of time (based on historic use levels).

Outfitters could only operate out of multiple portals based upon historic use.

The business at Hells Canyon Creek would not be limited by area of operation during the secondary season, allowing expansion of trips into the entire scenic and study river.

Commercial powerboats would be able to launch inflatable watercraft, subject to the float party having a valid float permit, year-round. Jetback and jetout service would be available for floaters, but the opportunity for this type of service would be dependent on the number of powerboat outfitters who would choose to provide this service in lieu of, or in combination with conducting jet boat tours. Overnight camping by commercial powerboats downstream from the mouth of the Salmon River would not be allowed.

The opportunity for visitors to travel by commercial powerboat to Cache Creek Ranch as the entry portal would be unlimited for trips originating downstream from Cache Creek.

The temporary use commercial powerboat permit authorizing use in the scenic river only, would not be renewed upon expiration of the permit at the end of the 1996 season. The types of services provided by this outfitter would be available through other powerboat outfitters.

Each commercial float trip, regardless of point of origin, would be limited to a maximum of 24 people and 8 boats per party year-round. During the secondary season there would be no limit on numbers of launches entering the scenic river, regardless of point of origin. Commercial floaters could use kickers on rafts in the scenic river year-round.

The resort at Copper Creek would be allocated a maximum of 16 cargo boat days per primary season (one per week) to support the overnight operations at this location. These boat days would not count against the cap on commercial passenger boat days, and would result in the outfitter being able to utilize the full allocation of boat days associated with the commercial powerboat permit to provide the opportunity for the outfitted public to use this location for overnight lodging in association with outfitted trips.

Total commercial powerboat launches (boat days) per portal that could enter the scenic river:

> Hells Canyon Creek - 114 boat days - limited to travel downstream to Pittsburg Landing only (one trip per day maximum on motorized days only in the wild river). This would result in travelling in only 1.4 miles of the scenic river.
>
> Pittsburg Landing -- 80 boat days
>
> Cache Creek -------- 904 boat days

SCENIC RIVER TOTAL = 1,098 boat days - a maximum of 9.8 boats/day. However, 114 boat days are confined to operating in only 1.4 miles of the scenic river upstream from Pittsburg Landing. This would be a maximum of 8.8 boats per day downstream from Pittsburg.

This alternative would have a high capability of providing a diverse outfitted experience by offering a variety of outfitted services. The flexible boat day schedule for commercial powerboats would improve the opportunity for visitors to reach particular destinations without advance bookings or the need to travel to a different portal for an available launch date or destination. Only one outfitter would be limited to an area of operation in the scenic river during the primary season, but allowed to expand operations in the secondary season. Cargo launches in support of Copper Creek would allow complete use of the commercial powerboat allocation associated with the resort to provide overnight lodging for visitors as a component of an outfitted trip.

Table III-1 -- Capability to Achieve Desired Recreation Experience

Alternative	A		B		C	
Analysis Category	**Wild**	**Scenic**	**Wild**	**Scenic**	**Wild**	**Scenic**
Desired Recreation Experience	L	L	H	M	H	M
Visitor Management	L	L	H	H	H	H
Campsite Competition	H	*	H	*	H	*
Diversity of Outfitter Services	M	L	M	M	H	H

H = High potential for achieving objective as discussed in Chapter III

M = Moderate potential for achieving objective as discussed in Chapter III

L = Low potential for achieving objective as discussed in Chapter III

* Acceptable for Alternatives B and C. Unacceptable for Alternative A.

TOTAL LAUNCHES/BOAT DAYS BY PORTAL

Primary Season Commercial Power Boat Days/Portal	1988-92 (Base Period) Avg. Actual Use Alternative A	Allocation Alternative B	Allocation Alternative C	1993-94 Average Actual Use
Hells Canyon Creek	387	224	397	405
Pittsburg	57	62 (+88**)	80	105
Cache Creek	839*	834	904	814
TOTAL	1,283	1,208	1,381	1,324

Primary Season Commercial Float Launches/Portal	1988-92 (Base Period) Avg. Actual Use Alternative A	Allocation Alternative B	Allocation Alternative C	1993-94 Average Actual Use
Hells Canyon Creek	179	216	216	150
Pittsburg	1	0	0	0
Cache Creek	NA	NA	NA	NA

* Includes Mainstream Outdoor Adventures, Inc., temporary use
** 88 "Special" boat days limited by area of operations to Pittsburg Landing-Kirkwood segment of river

ECONOMIC EFFECTS

INTRODUCTION

This section displays potential economic effects to commercial powerboat and float outfitters operating on the Hells Canyon National Recreation Area section of the Snake River due to implementing the alternatives described in Chapter II. The alternatives affect the mix and intensity of recreation opportunities in the river corridor. The alternatives result in changes to the amount of access to different segments of the river for commercial powerboat and floatboat permittees. Businesses which supply goods and services for commercial outfitters and river recreationists are also affected. The potential economic effects to communities in the impact area due to changes in commercial outfitter purchases and the associated recreation expenditures are also discussed.

The economic effects of the operational limitation decisions in each alternative are assessed for the powerboat and floatboat outfitters. See Chapter I for a list of these decisions. The key indicators used to assess the effects are:

- Total allocation of use (boat days for powerboats and launches for floatcraft)
- Annual commercial permittee gross revenue
- Scheduling flexibility

Changes to these key indicators are measured in comparison to Alternative A (No-Action) which represents the average use and gross revenue that occurred during the base period of analysis (1988-92). Additional effects to communities in the impact area are described in terms of changes to jobs and income.

Dollar values displayed in this section are only estimates of the comparative impacts of the alternatives and are not necessarily precise predictors of actual impacts which may occur with the implementation of any alternative. All dollar values are described in terms of 1996 dollars.

For additional information on methods and assumptions used to determine the economic effects, refer to the FEIS for the Snake River Plan, Ch. III - 22 to 31, Ch. IV - 105 to 107, and Snake River Outfitter EA economic analysis files. Information used to determine effects was developed from actual use reports submitted by each outfitter.

The powerboat businesses are discussed in the first part of this chapter followed by the floatboats businesses.

DESCRIPTION OF COMMERCIAL POWERBOAT OUTFITTERS

Currently, there are 19 powerboat outfitters (18 priority use and 1 temporary use) permitted to operate on the HCNRA portion of the Snake River. In order to help describe the outfitters, they are grouped by three portals of operation to identify where they primarily access the river; Hells Canyon Creek, Pittsburg Landing, and Cache Creek. These groups, unless otherwise, noted are further defined by size of business (in terms of amount of boat days used), and primary type of business (scenic tours or fishing). Koch is grouped due to like ownership.

<u>Hells Canyon Creek</u> (scenic tours and fishing)

- Hells Canyon Adventures (Armacost)

<u>Cache Creek 1</u> (more than 1 launch per day, primarily scenic tours)

- Heller Bar Excursions (Koch HBE)
- Idaho Rivers Navigation (Koch IRN)
- Rivers Navigation (Koch RN)
- Snake River Adventures (Luther)

<u>Cache Creek 2</u> (approximately 1 launch every other day and primarily scenic tours)

- Snake Dancer Excursions (Alboucq)
- River Quest Excursions (Odegaard)
- Snake River Outfitters (Riddle) (primarily fishing, but one launch every 2-3 days)
- Cougar Country Lodge (Taylor)

<u>Cache Creek 3</u> (approximately 10 launches or less per primary season (except Lamm) and primarily fishing)

- Anderson River Adventures (Anderson)
- Intermountain Excursions (Bentz)
- S&S Outfitters (Bream)
- High Roller Excursions (Eddins)
- Mainstream Outdoor Adventures, Inc. (Lamm)
- Three River Outfitters (Maxwell)
- Z&S Outfitters, Inc. (Zapffe)

<u>Pittsburg Landing</u> (7-30 launches per primary season, primarily fishing and scenic tours)

- Hells Canyon Fishing Charters (Cook)
- River Adventures Limited (Whitten)
- Red Woods Outfitter (Woods)

Each outfitter offers a specific range of services which are not shown above. For detailed information by outfitter, refer to "Outfitter Narratives" in the analysis file and the historical summary of outfitter businesses in Appendix A.

The following discussion of effects uses the outfitter's last name instead of the registered business name for clarity.

RECENT TRENDS IN COMMERCIAL POWERBOAT BUSINESSES

Several factors are evaluated to determine recent trends in individual business and overall industry operations since the base period, refer to Table III-2. Comparisons are made between the base period 1988 to 1992 and 1993 to 1994. Displayed in Table III-2 is the most recent complete information.

Table III-2
Primary Season Gross Revenue, Boat Day, and Service Day Trends
(Base Period Average 1988-92 Compared to Two-year Average 1993-94)
(Commercial Powerboat Outfitters)

Outfitter	Turnover Rate from first SUP	Change in Revenue	Change in boat days	Change in service days	Change in svds/btday	Change in $/boat day	Change in $/service day
Hells Canyon Creek:							
Armacost	2	66%	5%	73%	65%	59%	-4%
Cache Creek #1:							
Koch HBE	2	-4%	-2%	-17%	-15%	-2%	15%
Koch IRN	2	101%	121%	115%	-2%	-9%	-7%
Koch RN	2	87%	-70%	-27%	147%	531%	155%
Luther	0	59%	-4%	62%	69%	65%	-2%
Cache Creek #2:							
Alboucq	2	28%	15%	18%	3%	11%	8%
Odegaard	3	5%	-16%	-13%	4%	25%	20%
Riddle	0	18%	8%	-3%	-10%	9%	22%
Taylor	2	-14%	-19%	-10%	11%	6%	-4%
Pittsburg Landing:							
Cook	3	-15%	113%	84%	-13%	-60%	-54%
Whitten	0	27%	42%	76%	24%	-10%	-28%
Woods	0	120%	171%	164%	-3%	-19%	-17%
Cache Creek #3:							
Anderson	1	-67%	-50%	-59%	-17%	-34%	-20%
Bentz	0	106%	0%	7%	7%	106%	92%
Bream	0	-52%	100%	91%	-5%	-76%	-75%
Eddins	3	34%	60%	92%	20%	-16%	-30%
Lamm	1	-76%	-71%	-46%	88%	-17%	-56%
Maxwell	1	-54%	0%	-40%	-40%	-54%	-24%
Zapffe	0	133%	513%	474%	-6%	-62%	-59%
TOTALS	24	35%	3%	32%	28%	32%	3%

Several commercial powerboat businesses have changed ownership since their first special use permit was issued in 1970. Seven outfitters have operated continually since their first permits were issued. During the base period, outfitter businesses changed ownership eight times. After 1992, outfitter businesses changed ownership nine times.

Changes in overall revenue are due to a combination of factors including changes in number of trips, trip lengths, passengers, prices, discounts, services supplied, marketing efforts, weather, size of boats, river conditions, and numerous other elements. Over half of the outfitters (12) have experienced an increase in total revenue ranging from 5% to 133% since the base period. Decreases range from -4% to -76%. The average increase across all owners is 35%.

Ten of the 19 outfitters have increased the number of boat days used ranging from 5% to 513% since the base period. Decreases range from -2% to -71%. Overall, boat days have increased 3%. Twelve outfitters have increased the number of service days (one person per day or part of the day on the river) ranging from 7% to 474% since the base period. Decreases range from -3% to -59%. The industry average is an increase of 32%

Changes in ownership, type of trips, duration of trips, services provided, prices, boat sizes, etc., are variable between outfitters. However, the amount of revenue earned per service day provides a reasonable measure for comparing each business's performance to the base period. Six of the businesses have increased their revenue per service day since the base period ranging from 8% to 155%. The remaining businesses have decreased the amount of revenue earned per service day ranging from -25 to -75%. The average change across all owners is an increase of 3%.

Over the entire industry group, primary season revenue and primary season service days have increased by 35% and 32%, respectively. Boat days and revenue per service day have remained relatively stable, increasing by 3%. Secondary season revenue and service days over the same period have increased 25% and 69%, respectively. Boat days have increased 82% from the base period average.

EFFECTS OF ALTERNATIVES TO POWERBOAT OUTFITTERS

Refer to Chapter II for a detailed description of the operational limits for Alternative A (no action) and Alternatives B and C (action alternatives). The following sections describe direct and indirect effects to commercial powerboat outfitters.

Launch Locations for Commercial Powerboats

Alternative A allows all powerboat outfitters to launch from the portal during the base period except Hells Canyon Creek which is limited to a maximum of two outfitters. Refer to Table III-3 below for a description of effects from limiting launch point locations for each outfitter. Alternative A in Table III-3 represents where the outfitter primarily launched during the base period.

Alternatives B and C limit outfitters to one portal for access, except Riddle, who historically launched from both Cache Creek and Pittsburg Landing portals. Outfitters can no longer launch their boats from different portals, but they can still pick up passengers from different locations on the river with the exception that outfitters originating trips from the scenic river section could not pick up passengers upstream of Wild Sheep Rapids.

Limiting launch point locations does not directly reduce boat days for powerboat outfitters because they can continue to operate from the portal they primarily use. Establishing a single launch point limits flexibility for launching boats from a different portal, but no economic impacts to outfitter's gross revenue are expected compared to Alternative A because all outfitters can launch from their usual launch point.

Table III-3 Launch Locations			
Outfitter	Alternative A	Alternative B	Alternative C
Hells Canyon Creek:			
Armacost	Hells Canyon Creek	No change	No change
Cache Creek 1:			
Koch HBE	Cache Creek	No change	No change
Koch IRN	Cache Creek	No change	No change
Koch RN	Cache Creek	No change	No change
Luther	Cache Creek	No change	No change
Cache Creek 2:			
Alboucq	Cache Creek	No change	No change
Odegaard	Cache Creek	No change	No change
Riddle	Cache Creek/Pittsburg	No change	No change
Taylor	Cache Creek	No change	No change
Cache Creek 3:			
Anderson	Cache Creek	No change	No change
Bentz	Cache Creek	No change	No change
Bream	Cache Creek	No change	No change
Eddins	Pittsburg Landing	Cache Creek accommodates current owner	Cache Creek accommodates current owner
Lamm	Cache Creek	No permit	No permit
Maxwell	Cache Creek	No change	No change
Zapffe	Cache Creek	No change	No change
Pittsburg Landing:			
Cook	Pittsburg Landing	No change	No change
Whitten	Pittsburg Landing	No change	No change
Woods	Pittsburg Landing	No change	No change

Areas of Operation

Alternative A allows powerboat outfitters to operate in the any section of the river. Refer to Table III-4 below for a description of effects from limiting areas of operation for each outfitter by alternative. Alternative A in Table III-4 represents the farthest point each outfitter traveled on at least one trip during the base period. Effects are displayed in terms of the percent of total boat days from the base period affected by limiting areas of operation.

Alternative B limits outfitters to a specific area on the river year-round reducing the flexibility of conducting a trip anywhere on the river for the entire year. Approximately 2% or less of annual boat days used by Armacost, Koch HBE, Anderson, Maxwell, and Zapffe are moved from their historic area of use. Eddins, Cook, and Woods have approximately 8%, 13%, and 14%, respectively, of their annual boat days moved from their historic area of operation.

Alternative C limits outfitters to a specific area on the river during the primary season reducing the flexibility of conducting a trip anywhere on the river, but less than Alternative B because outfitters can continue to operate anywhere on the river in the secondary season. Approximately 2% or less of annual boat days used by Armacost, Koch HBE, Maxwell, and 3% of annual boat days used by Woods are moved from their historic area of operation.

Economic impacts to gross revenue from moving boat days due to limitations on areas of operation for Alternatives B and C are displayed in the gross revenue summary of effects and Table III-9 later in this chapter.

Table III-4
Areas of Operation

Outfitter	Alternative A	Alternative B	Alternative C
Hells Canyon Creek:			
Armacost	Below Pittsburg Landing	Limit to Pittsburg, affects 2% of base period use	Limit to Pittsburg, affects 2% of base period use
Cache Creek 1:			
Koch HBE	Hells Canyon Dam	Limit to Rush Creek, affects ≤ 1% of base period use	Limit to Rush Creek, affects ≤ 1% of base period use
Koch IRN	Rush Creek	No change	No change
Koch RN	Rush Creek	No change	No change
Luther	Hells Canyon Dam	No change	No change
Cache Creek 2:			
Alboucq	Rush Creek	No change	No change
Odegaard	Hells Canyon Dam	No change	No change
Riddle	Hells Canyon Dam	No change	No change
Taylor	Hells Canyon Dam	No change	No change
Cache Creek 3:			
Anderson	Hells Canyon Dam	Limit to Rush Creek, affects 2% of base period use	No change
Bentz	Hells Canyon Dam	No change	No change
Bream	Granite	No change	No change
Eddins	Hells Canyon Dam	Limit to Granite, affects 8% of base period use	No change
Lamm	Pittsburg Landing	No permit	No permit
Maxwell	Hells Canyon Dam	Limit to Rush Creek, affects ≤ 1% of base period use	Limit to Rush Creek, affects ≤ 1% of base period use
Zapffe	Hells Canyon Dam	Limit to Granite, affects 2% of base period use	No changes
Pittsburg Landing:			
Cook	Hells Canyon Dam	Limit to Granite, affects 14% of base period use	No change
Whitten	Granite	No change	No change
Woods	Hells Canyon Dam	Limit to Granite, affects 13% of base period use	Limit to Granite, affects 3% of base period use

Maximum and Minimum Numbers of Commercial Powerboat Outfitters at Specific Portals

Alternative A does not change the number of permits by portal from the base period (19 total). Refer to Table III-5 for a description of effects from establishing minimum and maximum numbers of permits by portal by alternative.

Alternatives B and C maintain the overall maximum number of potential permits at 19. The alternatives allow voluntary splitting of one business at Hells Canyon Creek (Armacost), and issuing a second priority use permit, and by eliminating the temporary use permit from the Cache Creek portal (Lamm). Minimum numbers of permits are established at Hells Canyon Creek (2), Pittsburg Landing (3), and Cache Creek (6) to maintain services offered to the public at each portal. Establishing minimum and maximum numbers of permits by portal have no effect on outfitter's boat days, gross revenue, or flexibility (except Lamm) because no change to the outfitters portals where they launch trips from is required. Lamm can no longer operate which eliminates all boat days and associated gross revenue. Refer to Chapter II and Appendix B and C for rationale and specific operating guidelines for maximum and minimum number of permits by portal.

Table III-5
Maximum Number of Outfitters

Portal	Alternative A	Alternative B	Alternative C
Hells Canyon Creek	1	2*	2*
Cache Creek	15	13	13
Pittsburg Landing	3	4	4
TOTAL	19	19*	19*

* Total of 19 permits due to voluntary splitting of business at Hells Canyon Creek, adding one permit at Pittsburg Landing as a result of movement of one business from Cache Creek to Pittsburg, and eliminating the temporary use permit from the Cache Creek portal. If a Cache Creek permit relocated to Pittsburg Landing, the maximum at Cache Creek would drop from 14 to 13.

Allocation of Use (total boat days)

Alternative A does not restrict outfitters number of boat days or destinations on the river. Commercial powerboat outfitters can increase their business commensurate with customer demand. Commercial powerboat use has increased an average of 6% annually from 1982 to 1992 and is expected to continue in the future (FEIS IV-114). During the base period, actual primary season use averaged 1,283 boat days. Based on outfitter actual use reports, over 70% (912 boat days) of the primary season boat days had destinations primarily to the wild river section between Kirkwood and Wild Sheep rapids. Approximately 17% (215 boat days) had destinations primarily in the scenic section between Cache Creek and Pittsburg Landing. The remaining 11% (136 boat days) had destinations primarily between Hells Canyon Dam and Wild Sheep, and 2% (20 boat days) had destinations primarily between Pittsburg Landing and Kirkwood.

Refer to Table III-6 for a description of boat days by section of the river for each outfitter and by portal groups. Refer to Table III-7 for a description of the change in boat days by section of the river for each outfitter. The Cache Creek to Pittsburg Landing (Scenic) section of the river is in the scenic river portion, and the Pittsburg Landing to Kirkwood (Kirkwood), and Kirkwood to Wild Sheep (Wild) sections of the river are in the wild river portion (see Figure I-1 in Chapter I).

Alternative B limits primary season use to 1,208 boat days, a 6% reduction from the base period (1,283 boat days). Refer to Chapter II and Appendix B for explanation of the allocation of total boat days. Allocating 1,208 boat days to all outfitters changes the total number of boat days by section of the river compared to the base period. Approximately 36% of the primary season boat days (440 boat days) are allowed in the wild river section between Kirkwood and Wild Sheep, a 52% reduction from the base period. Approximately 37% of the boat days can reach destinations in the scenic section (448 boat days). The remaining 15% (184 boat days) and 11% (136 boat days) are available for destinations in the Pittsburg Landing to Kirkwood section and the Hells Canyon Dam to Wild Sheep section, respectively. No change to the amount of use from Hells Canyon Dam to Wild Sheep occurs compared to the base period.

Distributing 1,208 boat days changes the total number of boat days for each outfitter compared to the base period. All outfitters except Alboucq (-3%), Armacost (-42%), and Lamm (-100%) receive a greater number of primary season boat days than they used during the base period. Increases in boat days range from 5% for Riddle to 100% (an increase from two to four boat days) for Maxwell. Lamm's will not be reissued upon expiration in 1996. Lamm will no longer incur the financial revenues and costs necessary to build and operate the business. Lamm will no longer provide river transportation for commercial recreation users to commercial lodging facilities on private land at Getta Creek.

Distributing 1,208 boat days changes the destinations of primary season boat days for each outfitter compared to the base period. All outfitters (except Armacost) receive a greater number of primary season boat days in the Cache Creek to Pittsburg Landing, and Pittsburg Landing to Kirkwood sections of the river. An additional increase (88 primary season boat days) occurs in the Pittsburg Landing to Kirkwood section for Pittsburg Landing portal outfitters only. Boat days for eight outfitters in the Kirkwood to Wild Sheep section are reduced by over 50% compared to the base period. Armacost receives the largest reduction (65%), followed by Luther (59%), Alboucq and Taylor (58% each), Odegaard (57%), Koch RN (54%), and Riddle and Woods (50% each). Two outfitters, Bream and Maxwell gain one and two days, respectively. Seven outfitters (Koch HBE, Koch IRN, Anderson, Bentz, Eddins, Cook, and Whitten) experience reductions in the boat days ranging from -11% to -34%. Zapffe maintains the same number of boat days in this section of the river compared to the base period.

Alternative B requires Koch RN and Luther to make supply trips to the Copper Creek Resort and Sheep Creek Cabin within their allocated boat days. Since these trips cannot carry passengers, this reduces their total boat days by 16 days for Koch RN and 4 days for Luther.

Alternative C limits primary season use to 1,381 boat days, an 8% increase over the base period (1,283 boat days). Refer to Chapter II and Appendix C for explanation of the allocation of total boats days. Allocating 1,381 boat days changes the total number of boat days by section of the river compared to the base period. Approximately 37% of the primary season boat days (513 boat days) are allowed in the wild river section between Kirkwood and Wild Sheep. Approximately 42% of the boat days can reach destinations up to Kirkwood (585 boat days). The remaining 20% (283 boat days) are allowed for destinations in the Hells Canyon Dam to Wild Sheep section, an increase of 107% compared to the base period use.

Distributing 1,381 boat days changes the total number of boat days for each outfitter compared to the base period. All outfitters except Koch HBE (-2%) and Lamm, whose temporary use permit is not reissued, receive a greater number of primary season boat days than they used during the base period. Increases range from 3% for Armacost to 100% (increase from two to four boat days) for Maxwell. The effects to Lamm are the same as described for Alternative B above.

Distributing 1,381 boat days changes the destinations of primary season boat days for each outfitter compared to the base period. All outfitters (except Armacost) receive a greater number of primary season boat days in the Cache Creek to Kirkwood section of the river. Primary season boat days with destinations allowed in the Kirkwood to Wild Sheep wild river section are reduced by over 50% for six outfitters compared to the base period. Riddle receives the largest reduction (65%), followed by Alboucq (56%), Armacost (54%), Koch RN and Taylor (51% each), and Woods (50%). Two outfitters, Bream and Maxwell, gain one and two days, respectively. Nine outfitters (Koch HBE, Koch IRN, Luther, Odegaard, Anderson, Eddins, and Whitten) experience reductions in the boat days with destinations allowed in this section ranging from -19% to -46%. Bentz and Zapffe maintain the same number of boat days in this section of the river compared to the base period.

Additional boat days are allocated to Koch RN (16 boat days) for weekday use only, and Luther (4 boat days) for cargo trips to supply the Copper Creek Resort and the Sheep Creek Cabin, respectively. The number of boat days for cargo trips was based on input provided by these outfitters. These boat days are not included in the effects described above nor in Table III-6 and Table III-7.

Up to a maximum of 25 of the Sheep Creek Granger-Thye permit holder's Kirkwood-only boat days would be converted to Wild river launches above Kirkwood for the period that the permittee holds the permit in order to assure continued benefits of historic site protection. If the permittee drops or loses the permit, those boat days would revert back to Kirkwood-only status. If a permittee that successfully bids on the permit is allocated less than 25 Kirkwood-only boat days, then only the amount the permittee is allocated could be temporarily converted to Wild river launches above Kirkwood and only for the time period that the permittee holds the Sheep Creek Granger-Thye Permit. This redistributes the economic benefit of the access into the Kirkwood to Wild Sheep section to the new permit holder, but still within the total allocation of 1,381 boat days. Over all outfitters, the total effect is the same as described for Alternative C since no new boat days would be added. The 25 boat days from Kirkwood to Wild Sheep are included in the totals described above and in the Tables III-6 and Table III-7 for Luther.

Under all alternatives, secondary season boat days are not limited and will not affect outfitter's ability to grow and would not affect gross revenue from the secondary season. Potential shifts of use into the secondary season could result for Alternative A from continued increasing use in the primary season and for Alternatives B and C from limiting use in the primary season providing an additional source of revenue to outfitters. Limiting boat days in Alternatives B and C does not reduce Koch RN's boat days, gross revenue, and flexibility to deliver the mail once a week, because they are allocated 120 boat days in Alternative B and 118 boat days in Alternative C and need 32 boat days (one day upriver and one day downriver) to deliver the mail. The nonmotorized period (Monday through Wednesday) does not affect the boat days or gross revenue for their contract because they travel upriver on Wednesday, stay overnight at Copper Creek Resort (below Kirkwood), and deliver mail above Kirkwood on Thursday which is open for motorized craft. Refer to the summary of gross revenue and Table III-9 in a section later in this chapter for a description of the effects to gross revenue from the allocation of total boat days.

A[illegible]cation of Use
Primary Season
(Boat Days)

Outfitter	ALTERNATIVE A Total	A 5/22 - 6/30 Scenic	A 5/22 - 6/30 Kirk-wood	A 5/22 - 6/30 Wild	A 7/1 - 9/10 Scenic	A 7/1 - 9/10 Kirk-wood	A 7/1 - 9/10 Wild	ALTERNATIVE B Total	B 5/22 - 6/30 Scenic	B 5/22 - 6/30 Kirk-wood	B 5/22 - 6/30 Wild	B 7/1 - 9/10 Scenic	B 7/1 - 9/10 Kirk-wood	B 7/1 - 9/10 Wild	ALTERNATIVE C Total	C 5/22 - 6/30 Kirk-wood	C 5/22 - 6/30 Wild	C 7/1 - 9/10 Kirk-wood	C 7/1 - 9/10 Wild	93-94 Actual Use Avg. Total
Hells Canyon Creek:																				
Armacost	387	-	-	63 (34)*	-	-	188 (102)*	224	-	-	40 (40)*	-	-	48 (96)*	397	-	40 (99)*	-	74 (184)*	405
Cache Creek I:																				
Koch HBE	228	31	-	38	71	1	87	222	39	-	40	72	24	47	224	45	34	86	59	224
Koch IRN	62	3	-	14	9	-	36	78	9	-	10	30	6	23	85	19	13	33	20	137
Koch RN	111	3	1	29	6	1	71	120	21	-	21	39	14	25	118	25	17	44	32	33
Luther	131	1	-	38	2	-	90	139	25	-	26	44	18	26	139	19	29	37	54	126
Cache Creek 2:																				
Alboucq	75	1	-	18	2	1	53	73	12	-	12	25	6	18	85	19	12	35	19	87
Odegaard	50	-	1	12	-	3	34	58	10	-	9	19	9	11	85	22	9	38	16	42
Riddle	37	-	-	-	1	2	34	39	7	-	9	12	3	8	43	7	-	24	12	40
Taylor	64	2	-	16	5	-	41	65	10	-	11	22	9	13	85	20	11	37	17	52
Cache Creek 3:																				
Anderson	4	-	-	1	-	-	3	6	1	-	1	2	-	2	6	1	1	2	2	2
Bentz	8	1	-	2	2	-	3	11	2	-	2	4	1	2	11	2	2	4	3	8
Bream	6	1	-	-	3	-	2	7	2	-	1	2	-	2	7	1	1	3	2	12
Eddins	5	-	-	2	1	-	2	6	3	-	3	-	-	-	6	1	1	2	2	8
Lamm	52	23	-	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Maxwell	2	-	-	-	1	-	1	4	1	-	1	1	-	1	4	-	-	2	2	2
Zapfe	4	1	-	2	-	-	1	6	1	-	1	2	-	2	6	1	1	2	2	25
Pittsburg:																				
Cook	20	4	-	4	6	1	5	24	6	-	4	6	4	4	31	7	4	14	6	43
Whitten	30	1	2	4	4	7	12	31	2	-	3	13	2	11	40	9	4	18	9	43
Woods	7	-	-	1	1	-	5	7	3	-	3	1	-	-	9	2	1	4	2	19
TOTALS:	1283	72	4	278 (34)	143	16	770 (102)	1120 (+88 "Spec." = 1,208)	154	-	237 (40)	294	96	339 (96)	1,381	200	279 (99)	385	517 (184)	1,324

* Armacost days from Hells Canyon Dam to Wild Sheep are included in totals for "Wild" column in parenthesis. Other "Wild" days can go to Pittsburg Landing.
"88 Special Launches" under Alternative B would be split among the three Pittsburg outfitters.

Table III-7
Allocation of Use
(Change In Primary Season Boat Days)
Compared to Base Period

	ALTERNATIVE A (+/- Boat Days from Base Period)							ALTERNATIVE B (+/- Boat Days from Alternative A)							ALTERNATIVE C (+/- Boat Days from Alternative A)					93-94 Actual Use Avg.
Outfitter	Total	5/22 - 6/30			7/1 - 9/10			Total	5/22 - 6/30			7/1 - 9/10			Total	5/22 - 9/10		7/1 - 9/10		Total
		Scenic	Kirk-wood	Wild	Scenic	Kirk-wood	Wild		Scenic	Kirk-wood	Wild	Scenic	Kirk-wood	Wild		Kirk-wood	Wild	Kirk-wood	Wild	
Hells Canyon Creek:																				
Armacost	0	0	0	0	0	0	0	-163	-	-	-23 (6)	-	-	-140 (-6)	10	-	-23 (65)	-	-114 (82)	18
Cache Creek I:																				
Koch HBE	0	0	0	0	0	0	0	-6	8	-	2	1	23	-40	-4	14	-4	14	-28	-4
Koch IRN	0	0	0	0	0	0	0	16	6	-	-4	21	6	-13	23	16	-1	24	-16	75
Koch RN	0	0	0	0	0	0	0	9	18	-	-8	33	13	-46	7	21	-12	37	-39	78
Luther	0	0	0	0	0	0	0	8	24	-	-12	42	18	-64	8	18	-9	35	-36	-5
Cache Creek 2:																				
Alboucq	0	0	0	0	0	0	0	-2	11	-	-6	23	5	-35	10	18	-6	32	-34	12
Odegaard	0	0	0	0	0	0	0	8	10	-1	-3	19	-6	-23	35	21	-3	35	-18	-8
Riddle	0	0	0	0	0	0	0	2	7	-	9	11	1	-26	6	7	-	21	-22	3
Taylor	0	0	0	0	0	0	0	1	8	-	-5	17	9	-28	21	18	-5	32	-24	-12
Cache Creek 3:																				
Anderson	0	0	0	0	0	0	0	2	1	-	-	2	-	-1	2	1	-	2	-1	-2
Bentz	0	0	0	0	0	0	0	3	1	-	-	2	1	-1	3	1	-	2	-	-
Bream	0	0	0	0	0	0	0	1	1	-	1	-1	-	-	1	-	1	-	-	6
Eddins	0	0	0	0	0	0	0	1	3	-	1	-1	-	-2	1	1	-1	1	-	3
Lamm	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-36
Maxwell	0	0	0	0	0	0	0	2	-1	-	1	-	-	-	2	-	-	1	1	-
Zapffe	0	0	0	0	0	0	0	2	-	-	-1	2	-	1	2	-	-1	2	1	21
Pittsburg:																				
[1]Cook	0	0	0	0	0	0	0	4	2	-	-	-	3	-1	11	3	-	7	1	23
[1]Whitten	0	0	0	0	0	0	0	1	1	-2	-1	9	-5	-1	10	6	-	7	-3	13
[1]Woods	0	0	0	0	0	0	0	-	3	-	2	-	-	-5	2	2	-	3	-3	12

1 Does not include 88 "Special" launches allocated to Pittsburg portal.
2 Armacost days from Hells Canyon Dam to Wild Sheep are included in totals for "Wild" column in parenthesis. Other "Wild" days can go to Pittsburg Landing.

Timing and Duration of Nonmotorized Period

Alternative A (no-action) does not have a nonmotorized period. This alternative does not result in restrictions to existing outfitter's businesses. No effects to gross revenue are projected, however, potential economic effects to float outfitters are discussed in a section on effects to float outfitters later in this chapter.

Refer to Table III-6 for a description of boat days by section of the river for each outfitter and by portal groups. Refer to Table III-7 for a description of the change in boat days by section of the river for each outfitter and by portal group compared to the base period. The Cache Creek to Pittsburg Landing (Scenic) section of the river is in the scenic river portion, and the Pittsburg Landing to Kirkwood (Kirkwood), and Kirkwood to Wild Sheep (Wild) sections of the river are in the wild river portion.

Alternative B limits boat days that occur on a nonmotorized day as a result of the launch calender with destinations allowed in the Kirkwood to Wild Sheep section to destinations downriver of Kirkwood for the Pittsburg Landing and Cache Creek portal outfitters and upriver of Wild Sheep rapids for the Hells Canyon Creek outfitter. This change in boat days destinations has been incorporated in the change to destinations described in the previous section on the allocation of use. The nonmotorized period in Alternative B affects all eight weeks in July and August, the months that receive the highest use in the primary season. This eliminates outfitter's flexibility to schedule trips to destinations between Kirkwood and Wild Sheep for approximately 39% (24 days out of 62 days) of the busiest time of the year.

Alternative C allocates boat days on a monthly basis, rather than specific days of the month as required under Alternative B. Outfitters have greater flexibility to schedule trips around the nonmotorized period because they could schedule all of their boat days around the nonmotorized period. All boat days with destinations allowed in the Kirkwood to Wild Sheep section could occur in this section except on a nonmotorized day. The nonmotorized period in Alternative C affects four to five weeks out of approximately eight weeks in July and August depending on the year, the months that receive the highest use in the primary season. This eliminates outfitter's flexibility to schedule trips to destinations between Kirkwood and Wild Sheep for approximately 22% (Monday - Wednesday) of the busiest time of the year. Outfitters need to schedule trips around the nonmotorized period, but still have the flexibility to schedule trips in this section of the wild river (14 days out of 62 days).

Refer to the summary of gross revenue and Table III-9 in a section later in this chapter for a description of the effects to gross revenue from the allocation of total boat days and by section of the river.

Launch Schedule

Alternative A (no-action) allows commercial powerboat outfitters to schedule boat trips throughout the year with complete flexibility because there is no launch calender. In the base period, 72% of the boat days occurred from July to September, and 28% occurred during May and June. All outfitters used more than 50% of their primary season use during July to September.

Refer to Table III-6 for a description of primary season boat days by May to June and July to September timeframes for each outfitter and by portal groups. Refer to Table III-7 for a description of the change in primary season boat days by May to June and July to September timeframes for each outfitter and by portal group compared to the base period. The Cache Creek to Pittsburg Landing (Scenic) section of the river is in the scenic river portion, and the Pittsburg Landing to Kirkwood (Kirkwood), and Kirkwood to Wild Sheep (Wild) sections of the river are in the wild river portion.

Alternative B assigns specific boat days to each outfitter with a launch calender prior to the beginning of the primary season. The daily launch calendar changes the proportion of boat days to 36% in May to June and 64% in July to September, a 22% increase in the early part of the primary season and a 16% reduction in the latter part of the season compared to the base period. Refer to Appendix B for specific operating guidelines for the daily launch calender.

Nine outfitters increase or maintain their number of days in the July to September period. Increases range from Koch RN (3%) to Maxwell and Zapffe (100%). Other outfitters increase boat days in July to maintains the same number of boat days in the July to September period compared to the base period.

Ten outfitters decrease their number of boat days in the July to September period. The largest decrease occurs to Eddins (-100%) followed by Woods (-83%), Armacost (-50%), Riddle (-38%), Bream (-20%), Albioucq (-11%), Koch HBE (-10%), Taylor (-4%), and Luther (-2%). Lamm's temporary use permit would be eliminated, a 100% reduction in boat days and gross revenue.

Alternative C assigns eleven outfitters a number of boat days by month and seven outfitters a number of boat days for the primary season prior to the beginning of the primary season rather than on a daily basis as in Alternative B. The monthly launch calendar changes the proportion of boat days to 34% in May to June and 66% in July to September, a 34% increase in the early part of the primary season and a 3% reduction in the latter part of the season compared to the base period. Refer to Appendix C for specific operating guidelines for the monthly launch calender.

Fourteen outfitters increase or maintain their number of days in the July to September period. Increases range from Luther (+1%) to Maxwell (+300%). Other outfitters increase boat days in July to September by Koch IRN (18%), Odegaard (42%), Taylor (17%), Anderson and Eddins each (33%), Cook (67%), and Whitten (23%). Koch RN, Bentz, Bream, and Woods maintain the same number of boat days in the July to September period compared to the base period.

Five outfitters decreased their number of boat days in the July to September period. The largest decrease occurs to Armacost (-11%) followed by Koch HBE (-9%), Alboucq (-2%), and Riddle (-3%). Lamm's temporary use permit would be eliminated, a 100% reduction in boat days and gross revenue.

Under Alternative A, each outfitter has 100% flexibility to market a trip on any day of the primary season and is able to use as many boats as necessary to accommodate user demands. The fixed daily launch schedule in Alternative B provides the outfitter with no flexibility to shift launch dates within the primary season boat day allocation to accommodate trip demands, walk-in traffic, large groups, and specially arranged trips unless they trade dates with another powerboat outfitter. Alternative C provides 100% flexibility to schedule trips on all days in the primary season, except for trips between Kirkwood and Wild Sheep on the 24 non-motorized days. Flexibility in scheduling is greater than Alternative B, although the specific number of days allocated by month or season long use limit flexibility compared to Alternative A. Refer to Table III-6 for boat day allocations by outfitter.

Party Sizes For Commercial Users

Alternative A allows all outfitters day use and allows eleven outfitters overnight use at campsites on the river. Overnight party size is limited to 30. Day use party size is limited as a result of Coast Guard restrictions on individual boat capacities. During the entire base period, only Taylor had more than 24 people (41) on an overnight trip. Outfitters authorized for overnight use with their existing permit can continue to conduct trips with up to 30 people.

Alternatives B and C reduce the party size to 24 year-round for overnight use compared to Alternative A. Day use continues to be limited by Coast Guard restrictions on individual boat capacities. No change to boat days, gross revenue, or flexibility is expected because all of the outfitters except Taylor can continue to operate as they did during the base period. The effects on flexibility to Taylor are minimal because one trip does not demonstrate a major portion of this operation, and he can continue to offer overnight trips on the river and can accommodate party sizes larger than 24 at his private lodge on the lower Snake River. No change to boat days or gross revenue are projected.

Trip Duration

Alternative A allows all outfitters day use and allows eleven outfitters overnight use at campsites on the river. All outfitters will continue to operate with day use and overnight use as authorized by their existing permit. Refer to Table III-9 for a description of trip duration during the entire year in the base period for each outfitter and by portal groups, and a description of the effects of the action alternatives.

Alternatives B and C will not allow three outfitters who used river campsites during the base period to use campsites overnight. This affects 3% of Alboucq's total boat days, 9% of Bentz's total boat days, and 5% of Bream's total boat days compared to how they operated during the base period. Bentz and Bream can at their private lodges on the Salmon River. Alboucq does not have a private lodge, but can still offer overnight trips through other private lodge owners on the river.

Alternatives B and C also eliminate overnight camping during the primary season for commercial powerboaters in the sections of the river from Hells Canyon Dam to Wild Sheep and Kirkwood to Pittsburg Landing. Alternative B also eliminates camping from the confluence of the Salmon to the north boundary of the HCNRA. All outfitters that can have overnight camps primarily camp between Granite Rapids and Kirkwood. Limited commercial powerboat camping in the section from Kirkwood to Pittsburg Landing has been observed and reported because the sites are either inaccessible to powerboats, or within one mile of Pittsburg Landing (approximately six miles from Kirkwood). Only one overnight powerboat trip occurred in the section below the confluence during the base period. Based on the use that occurs in these sections, boat days, gross revenue, and scheduling flexibility will not be reduced by this limitation.

Changes to gross revenue are projected in the summary of gross revenue effects as a result of the allocation of boat days later in this section. Refer to Table III-9. Outfitter's flexibility to offer day use or overnight use will not change for 15 outfitters in Alternatives A and B because they do not have to change the duration of their trip compared to how they operated in the base period. The three outfitters (Alboucq, Bentz, and Bream) would lose all flexibility to offer overnight trips in river campsites on the river. They maintain 100% flexibility to offer overnight trips in private lodges along the Snake River and Salmon River.

Table III-8 Trip Duration			
Outfitter	**Alternative A**	**Alternative B**	**Alternative C**
Hells Canyon Creek:			
Armacost	Day use only	No change	No change
Cache Creek 1:			
Koch HBE	Day use only, overnight at Copper Creek Resort	No change	No change
Koch IRN	Day use only, overnight at Copper Creek Resort	No change	No change
Koch RN	Day use only, overnight at Copper Creek Resort	No change	No change
Luther	Day use only, overnight at Sheep Creek Cabin	No change	No change
Cache Creek 2:			
Alboucq	6 overnight trips	Day use only	Day use only
Odegaard	Day & overnight use	No change	No change
Riddle	Day use, overnight at private lodge at Kirby Creek on Snake River	No change	No change
Taylor	Day & overnight use on river and at private lodge on lower Snake River	No change	No change
Cache Creek 3:			
Anderson	Day & overnight use	No change	No change
Bentz	Day use & 6 overnight trips	Day use, overnight at private lodge	Day use, overnight at private lodge
Bream	Day use & 1 overnight trip, overnight at private lodge	Day use, overnight at private lodge	Day use, can still overnight at private lodge
Eddins	Day & overnight use	No change	No change
Lamm	Day and overnight use	No permit	No permit
Maxwell	Day use only, overnight at lodge on Salmon River	No change	No change
Zapffe	Day use, overnight at private lodge on lower Snake River	No change	No change
Pittsburg Landing:			
Cook	Day use & overnight use	No change	No change
Whitten	Day & overnight use	No change	No change
Woods	Day & overnight use	No change	No change

Maximum Size (length) of Commercial Powerboats

Under Alternative A (no action), powerboat lengths is restricted by Coast Guard requirements for passenger safety, capacity, etc. Two outfitters (Koch and Luther) have used boats longer than 39.6 feet. Luther currently has a 40 ft. boat in service and a 42 ft. boat under construction that will be certificated by the Coast Guard. Koch has a two 42 ft. boats in service and a 55 ft. boat under construction that will be certificated by the Coast Guard. Outfitters will be able to build larger boats than they currently operate to increase the number of passengers per trip potentially increasing gross revenues.

Alternative B restricts powerboat length to 39.6 feet and does not affect boats currently owned by outfitters. Any powerboat currently in operation longer than 39.6 feet including the new boats under construction by Koch and Luther could continue to operate until the boats needed to be replaced. At that time, they would have to replace them with a 39.6 ft. boat which potentially reduces seating capacity. Loss of seating capacity also potentially reduces gross revenue.

Alternative C restricts powerboat length to 42 feet and does not affect boats currently owned by outfitters. This increases some outfitter's seating capacity compared to their current boat sizes (less than 39.6 feet). Koch would have to replace their new 55 ft. boat under construction with a boat 42 ft. or less reducing seating capacity, but slightly less than compared to Alternative B. Loss of seating capacity also potentially reduces gross revenue.

Launching of Inflatable Watercraft from Commercial Powerboats

In Alternative A (no action) all outfitters can continue to use inflatables as a service to floaters in conjunction with their powerboat operations. During the base period, four (Koch, Luther, Odegaard, and Anderson) outfitters reported use associated with launching inflatables. Koch launched rafts from their powerboats in conjunction with their special use float permit. Typically, Koch dropped off passengers and rafts at Rush Creek for a one-day float trip downriver to Copper Creek Resort. Luther launched passengers in rafts at Granite Creek where they floated downriver to Sheep Creek or Pittsburg. Odegaard launched inflatables on one trip in the five years of the base period. Anderson reported use, although the extent is unknown. This alternative allows for growth in this activity limited only by demand from float customers with valid float permits.

Under Alternative B, Luther's temporary float permit is eliminated. Koch's flexibility to start their float trips either multi-day or one-day from anywhere between Hells Canyon Creek and Pittsburg Landing is eliminated. They still maintain the opportunity to do one-day and multi-day float trips, but have to originate all trips at Hells Canyon Creek. They cannot use powerboats in conjunction with the float business on 24 nonmotorized days in the Kirkwood to Wild Sheep river section. Float launches are not reduced, but reductions in gross revenue may occur from having to schedule trips around the nonmotorized period. Powerboats can still pick up passengers at the end of the day below Kirkwood if necessary to reach Copper Creek Resort that night. Float trips have to be coordinated with allocated powerboat days under a daily schedule. Koch (IRN and RN) have enough boat days allocated under this alternative to accommodate powerboat support for the float business. Refer to Table III-6 for boat day allocations. The effect to Odegaard of eliminating their ability to launch inflatables is less than one percent of the base period use. The effect to Anderson is undetermined because the amount of use associated with launching inflatables for Anderson is unknown.

Under Alternative C, Koch and Luther continue to operate raft trips in conjunction with their powerboat businesses as occurred during the base period, except on nonmotorized days. The nonmotorized period alternates every other week in June, July, and August of the primary season rather than eight weeks in July and August as occurs in Alternative B and has a lesser effect on allocated float launch dates that occur on nonmotorized days. Float trips have to be coordinated with boat days allocated under a flexible monthly allocation rather than a daily allocation as under Alternative B. Koch (IRN and RN) have enough boat days allocated under this alternative to accommodate powerboat support for the float business. Refer to Table III-6 for boat days allocated. The effect to Odegaard of eliminating their ability to launch inflatables is less than one percent of the base period use. The effect to Anderson is undetermined because the amount of use associated with launching inflatables for Anderson is unknown.

Gross Revenue Effects

During the base period, average annual gross revenue totalled $1,721,955 for all powerboat outfitters. All dollar values are displayed in 1996 dollars. Based on gross revenues reported by each outfitter for the entire year, from 1988 to 1995 total revenue ranged from a high of $2,219,720 in 1993 to a low of $1,238,809 in 1988. Average revenue for the period 1993-95 totalled $2,026,301. The highest year of revenue for twelve outfitters (Armacost, Koch HBE, Koch IRN, Luther, Alboucq, Odegaard, Riddle, Whitten, Woods, Bentz, Eddins, and Zapffe) was reported in the period 1993-95. The other seven (Koch RN, Taylor, Cook, Anderson, Bream, Lamm, and Maxwell) reported the highest revenue during the base period.

Six outfitters (Armacost, Koch IRN, Luther, Alboucq, Odegaard, and Bentz) reported their highest year of revenue in 1995. Individual gross revenues ranged from a low of $2,358 (Bream) to a high of $527,955 (Koch HBE) during the base period, and a low of $525 (Maxwell) to a high of $568,643 (Koch HBE) from 1993 to 1995. Gross revenues in Alternative A (no-action), will continue to fluctuate as a result of a variety of factors including business turnover, customer demands, marketing, weather conditions, river conditions, prices, individual owner's business ability, etc.

Gross revenue associated with each section of the river was determined from the amount of service days reported to destinations and price differences charge for trips to different destinations within the Cache Creek to Pittsburg, Pittsburg to Kirkwood, Kirkwood to Wild Sheep, and Wild Sheep to Hells Canyon Dam portions.

Based on outfitter brochures for the base period, the outfitters charged 25% more for a trip in the Kirkwood to Wild Sheep section than the Cache Creek to Pittsburg Landing, the scenic section (generally downriver of Dug Bar) section. Since Kirkwood has an interpretive facility (historical museum and buildings), and is within the wild river section, an assumption was made that trips to this destination would be 15% less than a trip above Kirkwood. Armacost's revenue was adjusted in a similar manner for the Hells Canyon Dam to Wild Sheep and Wild Sheep to Kirkwood destinations considering that trip prices differed by 50-60% between these two sections of the river. No differences in advertised prices were discernible to adjust for revenue differences between the May-June and July-September periods of the primary season. Refer to the "Calculation of Average Gross Revenue" spreadsheets in the analysis file for each outfitter for a description of average gross revenue (1988-92) for the primary and secondary seasons by section of the river by May-June and July-September time periods.

The resulting relationship between service days per boat day and revenue per service day was used to determine total gross revenue for Alternatives B and C boat day allocations. Refer to Table III-9 for a description of annual gross revenue during the base period, 1993-95, for each outfitter, and by alternative. Alternative A represents the average gross revenue during the base period. The gross revenue effects account for primary season boat days allocated, allowed destinations of the boat days (including effects from the nonmotorized period), time period of allocated boat days during the primary season, and secondary season boat days used during the base period. Comparing the total gross revenue under the alternatives to the 1988-92 and the 1993-95 average gross revenue provides a relative indication of the magnitude of change. However, the comparisons are based on averages and may not represent the highest or lowest point of the potential change in gross revenue. Also, the 1993-95 average gross revenue represents a different distribution of revenue by section of the river than examined for the base period primarily due to changes in how many trips outfitters took to each section of the river, the number of passengers and days per trip, and the prices they charged. The two points of comparison provide a range of potential effects to individual outfitters.

Alternative B decreases annual gross revenue 11% compared to the 1988-92 average to $1,536,106. Six outfitters potentially experience a greater than 10% decrease in annual gross revenue. Lamm's gross revenue decreases the most (-100%) with the elimination of his permit, followed by Armacost (-35%); Alboucq (-16%), Koch RN (-15%), Woods (-13%), and Koch IRN (-10%). Four outfitters decrease gross revenue by 7% or less (Luther), followed by Riddle (-5%), Odegaard (-4%), and Koch HBE (-1%). Nine outfitters potentially experience a gain in gross revenue; Bentz (15%), Whitten (8%), Cook and Bream (7% each), Maxwell (6%), Anderson and Taylor (5% each), Zapffe (4%), and Eddins (1%).

Compared to the 1993-95 average gross revenue, Alternative B decreases annual gross revenue by 32%. Twelve outfitters potentially experience a decrease in annual gross revenue. Lamm's gross revenue decreases the most (-100%) with the elimination of his permit, followed by Armacost (-64%); Woods (-61%), Koch IRN (-59%), Zapffe (-55%), Odegaard (-51%), Bentz (-48%), Luther (-46%), Alboucq (-38%), Maxwell (228%), Anderson (218%), Bream (123%), Koch RN (45%), Taylor (40%), Cook (20%), and Koch HBE (11%).

Alternative C decreases annual gross revenue 5% compared to the 1988-92 average to $1,635,253. Four outfitters potentially experience a greater than 10% decrease in annual gross revenue. Lamm's gross revenue decreases the most (-100%) with the elimination of his permit, followed by Armacost and Koch RN (-12% each); and Woods (-11%). Three outfitters potentially decrease gross revenue by 7% or less (Koch IRN), followed by Koch HBE (-2%), and Alboucq (-1%).

Twelve outfitters potentially experience a gain in gross revenue; Odegaard (37%), Whitten (19%), Cook (17%), Bentz (16%), Taylor (9%), Bream and Anderson (7% each), Maxwell and Riddle (6% each), Anderson and Taylor (5% each), Zapffe (4%), and Eddins (3%). Luther maintain their 1988-92 average gross revenue.

Compared to the 1993-95 average gross revenue, Alternative C decreases annual gross revenue by 24%. Twelve outfitters potentially experience a decrease in annual gross revenue. Lamm's gross revenue decreases the most (-100%) with the elimination of his permit, followed by Woods (-60%); Koch IRN (-58%), Zapffe (-55%), Armacost (-51%), Bentz (-47%), Luther (-42%), Odegaard (-30%), Alboucq (-27%), Riddle (-10%), Whitten (-7%), and Eddins (-6%). Seven outfitters potentially experience a gain in gross revenue; Maxwell (228%), Anderson (223%), Bream (123%), Koch RN (49%), Taylor (44%), Cook (31%), and Koch HBE (10%).

The changes in gross revenue described from comparing Alternatives B and C gross revenue to the 1993-95 average gross revenue are probably overstated due to trends displayed in Table II-2. For example, considering the change in prices and trip destinations that have occurred for Armacost since the base period, Alternative B reduces gross revenue by 31% when compared to the 1993-95 average (instead of 64% shown for the base period analysis). Alternative C reduces gross revenue by 6% when compared to the 1993-95 average (instead of the 51% shown for the base period analysis).

The gross revenue effects described for Alternatives B and C assume all primary season boat days allocated are used based on the average yearly increase in commercial powerboat use of 6.1% from 1982 to 1992 (FEIS IV-114). The effects assume secondary season boat days remains constant with the level achieved during the base period. Secondary season use has actually increased an average of 22% yearly in the six years since 1988. Actual boat levels used depend on a variety of factors, including consumer preferences and disposable income levels, outfitter marketing ability, weather, and water flow levels.

The gross revenue effects between the alternatives and the base period differ primarily from the reductions in the allocated boat days in the Kirkwood to Wild Sheep section, and from increases or decreases in the total amount of allocated use for each outfitter. Refer to the previous section on the allocation of boat days effects and Table III-6.

In Alternative B, assuming none of the outfitters sold any allocated boat days in the Cache Creek to Pittsburg Landing river section) or to Kirkwood above the number they historically used in the scenic section, but sold all of the boat days above Kirkwood, annual gross revenue totals $1,258,486, a 27% decrease from the base period and a 61% decrease from the 1993-95 period. Effects to individual outfitters range from a high of -48% to Alboucq to a increase of 7% for Bream. Compared to 1993-95, individual effects could range from a high of -71% to Odegaard to an increase of 224% for Maxwell. In Alternative C, the decreases in potential gross revenue could be less since any allocated boat day from a scenic river portal can continue into the wild river to Kirkwood, and since all outfitters get more wild boat days than under Alternative B except Riddle and Whitten, who get five boat days and one boat day less, respectively.

Additional gross revenue effects to individual lodge owners beyond those accounted for by restricting boat days are not anticipated in the near future and unknown in the long-term. In the short-term, lodge owners maintain the capability to market their services to other outfitters and private users. In the long-term, limiting future growth in boat days for outfitters has the potential to reduce future growth for lodge owners.

Refer to Table III-9 for a description of annual gross revenue during the base period, 1993-95, for each outfitter, and alternative. Alternative A represents the average gross revenue during the base period.

Table III-9
Summary of Annual Gross Revenue Effects (1996$)
(Commercial Powerboats)

Portal Outfitter	Base Period Alternative A	Average Gross Revenue 1993-95	Alternative B	Percent Change from Base Period	Percent change from 1993-95	Alternative C	Percent Change from Base Period	Percent Change from 1993-1995	No New Market Oppor-tunities	Percent Change from Base Period	Percent Change from 1993-1995
HELLS CANYON DAM											
Armacost	$144,961	$260,018	$93,509	-35%	-64%	$128,059	-12%	-51%	$93,509	-35%	-64%
CACHE CREEK #1											
Koch HBE	$434,595	$386,642	$428,952	-1%	11%	$425,960	-2%	10%	$393,296	-10%	2%
Koch IRN	$159,787	$350,776	$143,128	-10%	-59%	$148,177	-7%	-58%	$117,490	-25%	-67%
Koch RN	$224,482	$131,957	$191,220	-15%	45%	$197,181	-12%	49%	$160,914	-28%	22%
Luther	$172,961	$295,084	$160,330	-7%	-46%	$172,430	0%	-42%	$92,181	-47%	-69%
Total:	$991,825	$1,164,460	$923,630	-7%	-26%	$943,748	-5%	-23%	$763,881	-23%	-52%
CACHE CREEK #2											
Alboucq	$76,879	$104,263	$64,617	-16%	-38%	$75,884	-1%	-27%	$40,232	-48%	-61%
Odegaard	$31,819	$62,019	$30,422	-4%	-51%	$43,473	37%	-30%	$17,816	-44%	-71%
Riddle	$66,817	$78,582	$63,190	-5%	-20%	$70,753	6%	-10%	$45,793	-31%	-42%
Taylor	$166,983	$125,881	$176,031	5%	40%	$181,875	9%	44%	$124,211	-26%	-1%
Total:	$342,498	$370,745	$334,260	-2%	-11%	$371,985	9%	0%	$228,052	-33%	-63%
CACHE CREEK #3											
Anderson	$10,104	$3,342	$10,623	5%	218%	$10,793	7%	223%	$9,349	-7%	180%
Bentz	$9,700	$21,450	$11,123	15%	-48%	$11,262	16%	-47%	$8,850	-9%	-59%
Bream	$4,034	$1,938	$4,330	7%	123%	$4,330	7%	123%	$4,330	7%	123%
Eddins	$7,121	$7,830	$7,170	1%	-8%	$7,346	3%	-6%	$6,583	-8%	-16%
Lamm	$67,382	$12,872	$0	-100%	-100%	$0	-100%	-100%	$0	-100%	-100%
Maxwell	$42,341	$13,675	$44,826	6%	228%	$44,902	6%	228%	$44,253	5%	224%
Zapfe	$41,868	$96,482	$43,515	4%	-55%	$43,653	4%	-55%	$42,455	1%	-56%
Total:	$182,550	$157,589	$121,584	-33%	-30%	$122,286	-33%	-29%	$115,820	-37%	-36%
PITTSBURG LANDING											
Cook	$25,202	$22,444	$26,841	7%	20%	$29,479	17%	31%	$24,579	-2%	10%
Whitten	$28,435	$36,614	$30,613	8%	-16%	$33,948	19%	-7%	$27,269	-4%	-26%
Woods	$6,484	$14,431	$5,669	-13%	-61%	$5,748	-11%	-60%	$5,376	-17%	-63%
Total:	$60,121	$73,489	$63,123	5%	-16%	$69,175	15%	-6%	$57,224	-5%	-28%
TOTAL:	$1,721,955	$2,026,301	$1,536,106	-11%	-32%	$1,635,253	-5%	-24%	$1,258,486	-27%	-61%

1. "No new market opportunity" means outfitter would not sell new scenic trips from boat days that were moved from the wild section to the scenic section under Alternative B.
2. Individual outfitter figures are from "Calculation of Gross Revenue" spreadsheets for each powerboat outfitter.

ASSESSMENT OF POWERBOAT BUSINESSES CAPABILITY TO ADAPT TO CHANGE

Revenue impacts short-term and long-term business health. In the short-term, a decrease in revenue can place a business at risk if the business cannot mitigate or weather these losses. The longer-term effect may be a decrease in capability to adapt to future change. For these reasons, it is important to assess the capacity of individual outfitters to adapt to decreases in gross revenue due to changes in operations described in the alternatives. It is also important to understand that a rigorous determination of individual business viability is not possible due to the private nature of each businesses financial records. Primary season gross revenue per service day is therefore used as a proxy to assess the potential of each outfitter to adjust to changes in gross revenue.

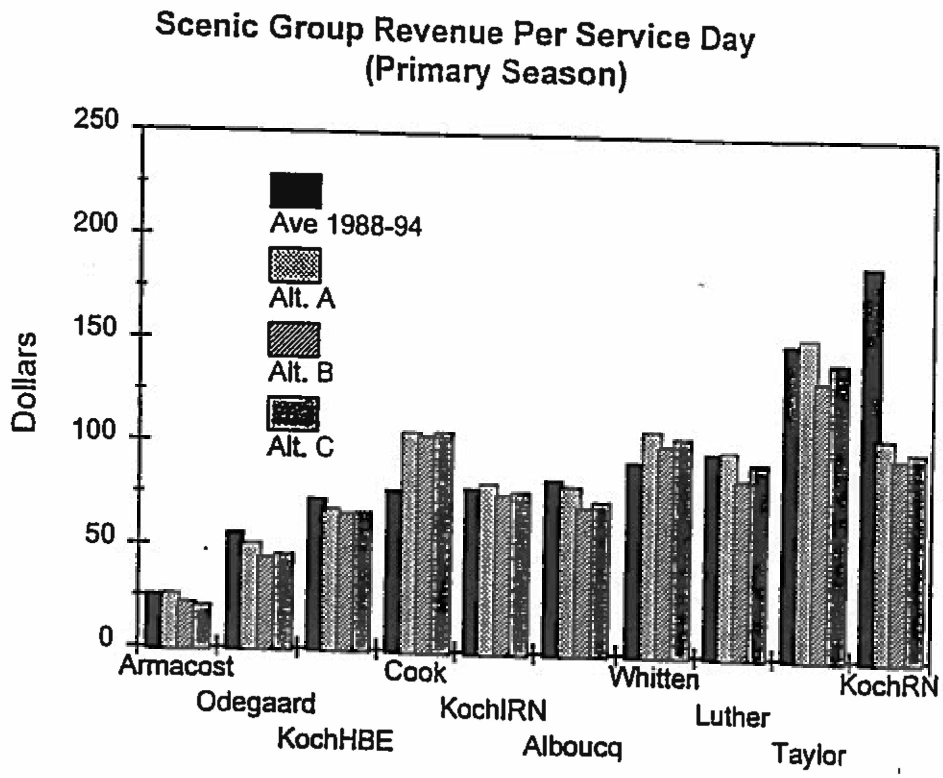
This proxy is based on the assumption that outfitters who earn a higher ratio of revenue to service day compared to other outfitters have less ability mitigate loss of revenue by increasing prices due to competition. Their business health is at more risk since they may have less capability to adapt to changes relative to the other outfitters.

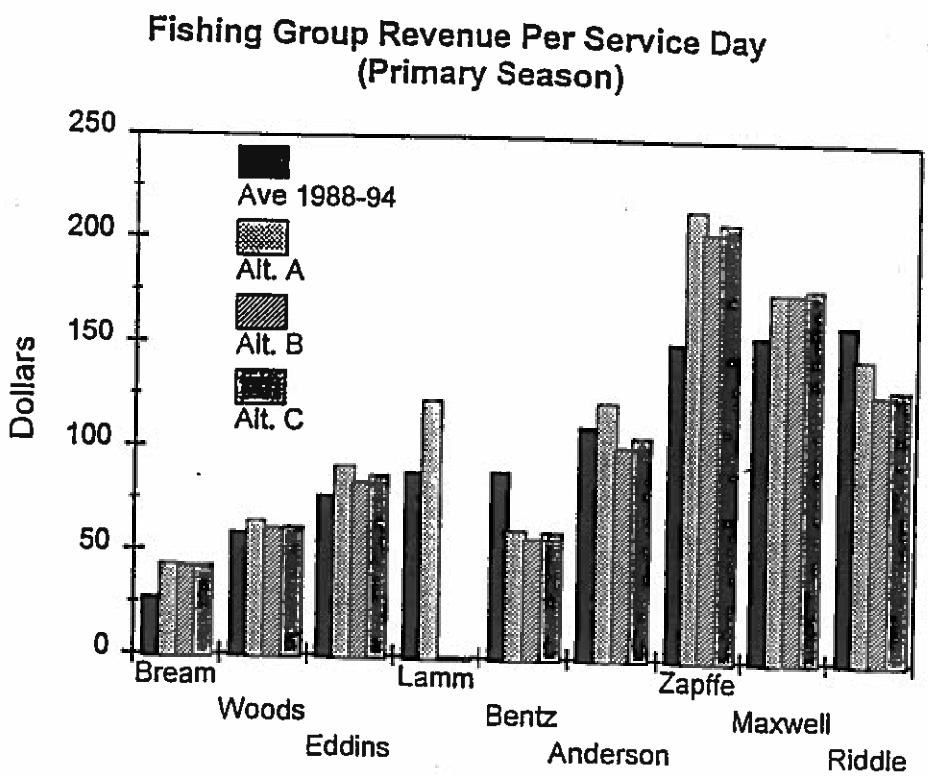
The 19 outfitters are grouped according to the primary type of service offered, scenic tours or fishing for analysis and display purposes. The scenic group consists of ten businesses; Alboucq, Armacost, Cook, Koch HBE, Koch IRN, Koch RN, Luther, Odegaard, Taylor, and Whitten. Armacost is included in this group, however, they are not truly comparable to the rest of the outfitters since they operate from Hells Canyon Dam downriver. The fishing group consists of nine businesses; Anderson, Bentz, Bream, Eddins, Lamm, Maxwell, Riddle, Woods, and Zapffe.

The revenue per service day is analyzed for each outfitter for the base period and for the 1993-94 period. The combined average of the two time periods is considered to reduce the variability in ownership, use, revenue, weather factors, river conditions, etc. occurring over the years.

Based on the index of revenue to service days, outfitters with higher ratios potentially have less capability to mitigate the decreased revenue effects of the alternatives. The outfitters with low ratios appear able to increase prices and remain competitive. The alternatives are then analyzed to determine potential short and longer-term impacts to the outfitter's capabilities to adapt to changes in their revenue per service day. Figures III-1 (Fishing Group Revenue Per Service Day) to III-2 (Scenic Group Revenue for Service Days) display the results of this analysis.

Figure III-2 Fishing Group Revenue Per Service Day





1994. Alternative A displays the revenue per service day derived from the base period of 1988 to 1992. Differences in the 1988 to 1994 average and Alternative A reveal the changes in revenue per service day realized during the 1993 to 1994 period. Compared to the 1988 to 1994 average, a shorter Alternative A bar means that either a lower price per service day or more service days were achieved during 1993 and 1994. A taller bar for Alternative A means the opposite. Alternative B and C are compared to Alternative A. Differences in bar heights are the result of changing the number of boat days combined with shifts in destinations on the river as a result of the action alternatives.

Compared to Alternative A, Alternatives B and C reduce revenue per service day for all outfitters except for a slight increase in Alternative C for Maxwell. The decreases for Alternative B range between 0% and 17% and the decreases under Alternative B are generally less that 10% except for Armacost who has a decrease of 20%.

Within the scenic group for the years 1988 to 1994, Whitten, Luther, Taylor, and Koch RN have generated the highest revenue per service day. Using this index as a proxy for adaptability to decreases in revenue, these businesses are least capable of mitigating alternative changes by raising price. In Alternative B, Luther and Taylor have a the second largest decreases (14%) in revenue per service day in this group. In Alternative C, Luther, Taylor, and Koch RN show decreases of 6%, 8%, and 6%, respectively. Cook, under all alternatives could be considered less capable of adapting to change, however, this company incurs the least decreases in revenue per service day under the action alternatives. It should be noted that use reporting fluctuates between the three Koch businesses which creates varied results for their average revenue per service day.

The fishing group for the years 1988 to 1994 has Anderson, Zapffe, Maxwell, and Riddle generating the highest revenue per service day. These businesses are least capable of mitigating alternative changes by raising price. In Alternative B, Anderson and Riddle have the largest decreases (17% and 12%, respectively) in revenue per service day in this group. In Alternative C, Anderson and Riddle also have the largest decreases in the fishing group (13% and 10%, respectively). Note that Lamm's temporary permit has been terminated under the action alternatives.

In the longer-term, those businesses that generally have higher revenue per service day ratios do not change their relative position with respect to the other outfitters. The outfitters that are least capable to adapt presently will remain so into the foreseeable future. What is not known is the relationship of business health to continued growth in boat days into the future. The businesses that are heavily dependent on expansion, with respect to boat days, may find it very difficult to adapt to the limits imposed under Alternatives B and C.

SUMMARY OF ECONOMIC EFFECTS

Refer to Table III-13 at the end of this Chapter for a summary of changes to boat days, total gross revenue, and scheduling flexibility by outfitter for each alternative.

There are 16 floatboat outfitters (14 priority use and 2 temporary use) permitted by the Forest Service to operate on the HCNRA portion of the Snake River. In addition, there are 35 float outfitters permitted by the BLM to operate on the Lower Salmon River and the lower portion of the Snake River below the confluence of the Snake and the Salmon rivers.

The outfitters permitted by the Forest Service are grouped below by multi-day and one-day float trips as follows:

Multi-Day	One-Day
Oars-Dories (Wendt)	Hells Canyon Adventures (Armacost)
Davis Whitewater Expeditions (Davis)	Snake River Adventures (Luther)
River Odysseys West (ROW) (Grubb)	
Canyon Outfitters, Inc. (Hauptman)	
Idaho Afloat (Howard)	
Hughes River Expeditions, Inc. (Hughes)	
Heller Bar Excursions (Koch B&F)	
Northwest Voyageurs (Peavey)	
Peer's Snake River Rafting (Peer)	
Oregon Trail Adventures (Porfily)	
Hells Canyon Adventures Raft (Randle)	
Freewater (Steele)	
Steen's Wilderness Adventures (Steen)	
Holiday River Expedition of Idaho (Stewart)	

All trips except Koch's and Luther's originate at Hells Canyon Creek. During the base period, Koch and Luther started many of their trips in the wild river in conjunction with their jetboat operations.

Each outfitter offers a specific range of services. For detailed information by outfitter, refer to the historical summary of float businesses in Appendix A and the "Outfitter Narratives" contained in the analysis file.

The following discussion of effects uses the outfitter's last name instead of the registered business name for clarity.

RECENT TRENDS IN COMMERCIAL FLOAT BUSINESSES

Several factors were evaluated to determine trends in individual business and overall industry operations since the base period (See Table III-10). The two-year average of 1993 and 1994 use and revenue is used as a reference point since this is the most complete recent information. Much of the data used in this analysis is estimated from the relationship between total gross revenue and primary season use figures. Since information on launches, passengers, and craft numbers is available only for the primary season, and gross revenue is available only for the total season, the actual ratios are overstated by the proportion of revenue received in the secondary season. However, the trends are valid.

Table III-10
Primary Season Gross Revenue, Float Launch, and Passenger Trends
(Base Period Average 1988-92 Compared to Two-Year Average 1993-94)
(Commercial Float Outfitters)

Outfitter	Launches Percent Change	Revenue Percent Change	Revenue/ Launch Percent Change	Passengers Percent Change	Revenue/ Passenger Percent Change	Craft/launch Percent Change	Trip Days Percent Change	Ownership Turnover
Multi-day Trips:								
Wendt	-35%	-60%	-37%	-65%	14%	-3%	-17%	2
Davis	-13%	19%	36%	0%	19%	28%	14%	1
Grubb	18%	41%	19%	30%	8%	28%	-11%	3
Hauptman	-6%	-87%	-2%	22%	-25%	89%	0%	3
Howard	0%	-1%	-1%	-37%	58%	-17%	-14%	2
Hughes	18%	54%	31%	57%	-2%	72%	0%	1
Koch B&F	-69%	-43%	83%	-44%	2%	540%	0%	2
Peavey	-33%	18%	76%	0%	18%	36%	0%	2
Peer	140%	-38%	-74%	496%	-90%	58%	-50%	2
Porfily	17%	-13%	-25%	1%	-14%	12%	-33%	4
Randle	-63%	-7%	148%	-39%	53%	1467%	-20%	2
Steele	-50%	-44%	11%	-48%	6%	0%	-9%	2
Steen	33%	78%	33%	65%	7%	55%	0%	1
Stewart	7%	79%	67%	56%	15%	22%	5%	2
One-day Trips:								
Armacost 1-day	27%	105%	62%	71%	20%	10%	0%	1
Luther 1-day	-63%	-89%	-70%	-91%	20%	-11%	0%	0
TOTALS	-12%	15%	30%	13%	1%	61%	-13%	30

Eight outfitters have increased or maintained the number of launches used ranging from 7% to 140% since the base period. Decreases in the number of launches used range from -13% to -69%. Across all owners, launches have decreased by 12%. This decrease in launches should be considered in light of the overall 13% increase in passengers. Ten outfitter have increased or maintained the number of passengers ranging from 1% to 496% since the base period. Decreases in the number of passengers range from -37% to -91%.

Seven out of sixteen outfitters have experienced an increase in total gross revenue ranging from 18% to 105% since the base period. Decreases in total gross revenue range from -1% to -89%. Changes in overall revenue may be due to a combination of factors including changes in number of trips, trip lengths, passengers, prices, discounts, services supplied, marketing efforts, weather, size of boats, river conditions, and numerous other elements.

Changes in ownership, type and duration of trips, services provided, prices, boat sizes, etc., is extremely variable between outfitters. However, the amount of revenue earned per passenger day (one person per day or part of the day on the river) provides a reasonable measure for comparing each business's performance to the base period. Twelve of the businesses have increased their revenue per passenger day since the base period ranging from 2% to 58%. The remaining four businesses have decreased the amount of revenue earned per service day ranging from -2% to -90%.

Over the entire commercial float industry group, total gross revenue and primary season passengers have increased by 15% and 13%, respectively, resulting in a 16% increase in revenue per passenger day compared to the base period. As noted above, float launches have actually decreased over the same period by -12%.

Four of the float outfitters have operated continually since the early 1980's. During the base period, float outfitter businesses changed ownership five times. More recently, outfitter businesses have changed ownership another five times.

EFFECTS OF ALTERNATIVES TO FLOAT OUTFITTERS

Refer to Chapter II for a detailed description of the operational limits for Alternative A (no action) and Alternatives B and C (action alternatives). The following sections describe direct and indirect effects to commercial float outfitters.

Launch Locations for Commercial Floatcraft and Areas of Operation

Alternative A allows all float outfitters to launch from Hells Canyon Creek, Pittsburg Landing, and Dug Bar during the primary and secondary seasons. All float outfitters launched from Hells Canyon Creek during the base period except Koch B&F and Luther who launched one-day float trips between Wild Sheep and Kirkwood in conjunction with their powerboat operations and overnight stays at Copper Creek Resort and Sheep Creek Cabin, respectively. Steele's business launched one float trip from Pittsburg Landing.

Alternative B limits launch locations to Hells Canyon Creek in the primary season, but does not limit locations in the secondary season. Establishing a single launch location limits outfitter's flexibility for launching trips from a different portal, but no economic impacts to outfitter's gross revenue are expected compared to Alternative A because all outfitters (except Koch B&F, Armacost, and Luther) can launch from their usual launch point. Koch B&F will need to move the origin of their trips from the area of Rush Creek upriver to Hells Canyon Creek. This does not eliminate any float launches or associated gross revenue because they can still use the same number of launches from the dam. It does limit their flexibility to launch below Hells Canyon Dam to accommodate one-day trips and reach Copper Creek Resort in the same day. Luther and Armacost will not have a permit, eliminating their float launches and associated gross revenue. The effect to Steele is minimal since the only trip occurred during the base period.

Alternative C allows all outfitters including Koch, Armacost, and Luther to launch float trips from anywhere upstream from Pittsburg Landing in the primary season with no restrictions in the secondary season. Designating launch locations does not reduce outfitters float launches or areas of operation or gross revenue because all commercial float outfitters can continue to launch from the location they primarily use (upriver of Pittsburg Landing).

Refer to the previous section on effects of launching inflatable watercraft from commercial powerboats for further discussion of effects from limiting launch locations to Koch B&F, Armacost, and Luther. Refer to the following section on the effects of the nonmotorized period to outfitters who operate in conjunction with their commercial powerboat permit.

Maximum and Minimum Numbers of Commercial Float Outfitters at Specific Portals

Alternative A allows for 16 commercial float permits which are all currently filled including two temporary use permits. Alternative B eliminates the two temporary use permits (Armacost and Luther), eliminating their total launches and gross revenue associated with these operations. The maximum number of permits total 14. Armacost's float launches and gross revenue will be eliminated from the Hells Canyon Creek portal. Luther's float launches and gross revenue will be eliminated from their float trips that operate in conjunction with their powerboat operations which originates passengers from the Cache Creek portal. Alternative C maintains all float permits (16) including the two temporary permits. No changes to float launches, gross revenue, or scheduling flexibility will occur from establishing minimum and maximum numbers of permits because outfitters can continue to launch from the portal they primarily launch from compared to Alternative A.

Allocation of Use (float launches)

In Alternative A (no-action), outfitters can continue to operate multi-day trips within their initial allocation of two launches per day with a specific launch calender for 224 total commercial launches during the primary season. The one vacant permit will continue to provide 14 additional launches to the commercial pool dates for scheduling flexibility. During the base period, actual primary season launches averaged 217. Two outfitters averaged more launches than they were allocated (Randle and Koch B&F). The extra launches occurred when unused launches in the pool were picked up or trips were conducted downstream of Rush Creek where reservations were not required (Koch). Randle's use occurred during the base period by another owner (Armacost) whose permit was used primarily to conduct one-day trips. The one-day float outfitters can continue to operate.

Alternatives B and C continue to limit commercial launches at the same level as Alternative A. The vacant permit will be split between private users (8 launches) and commercial users (6 launches) based on historical allocations of use between the two user groups. Individual outfitters can continue to operate within their allocated launches with the exception of Armacost and Luther whose one-day permits are eliminated. Refer to Chapter II and Appendix B and Appendix C for description of launch allocations for each outfitter. Randle's current use is not reduced compared to his allocation. Koch B&F has to rely on the unused commercial and private launches in the pool for two additional launches they used in the base period (16). Splitting the vacant permit reduces the total number of dates in the commercial portion of the pool for flexibility to schedule trips. The effect on float launches, gross revenue, and flexibility is minimal considering that 20% of commercial float launches were unused in 1992 and 27% were unused in 1995 providing on average three to four additional vacant launches per week. In the 1993-94 period, all outfitters were operating at or below their allocated launches.

Timing and Duration of Nonmotorized Period

Alternative A (no-action) does not have a nonmotorized period. Float outfitters will not have the flexibility to market a trip for a nonmotorized experience on the Snake River.

Alternative B and C allow for a three-day nonmotorized period providing float outfitters the opportunity to market this type of trip experience on the Snake River. This may or may not affect the number of trips, passengers, days on the river, and subsequent gross revenue depending on a variety of factors including each outfitter's marketing ability, business investment, debt load, weather, and river flows.

The nonmotorized period eliminates float outfitters ability to use jetback services to Hells Canyon Creek if they end their trip on a nonmotorized day. Nine outfitters reported using jetbacks to the dam for the majority or at least some of their trips during the base period. Average trip lengths for multi-day outfitters varies from 2-6 days. Outfitters may have to shorten or lengthen their trips to coincide with a motorized day for jetbacks to the dam. Outfitters will have to arrange ground transportation for shuttling customers back to Hells Canyon Dam or bring their gear and vehicles to the take-out point for trips ending on a nonmotorized day. Based on the number of days and launches in the primary season and the total number of nonmotorized days, a maximum of 22% of the float launches may be affected. Changes to gross revenue due to expenses for ground transportation and loss of jetback services and flexibility will occur for both float and powerboat outfitters to accommodate trips around the nonmotorized period.

Flexibility for both float and powerboat outfitters to schedule jetbacks around the nonmotorized period will be less in Alternative B than in Alternative C because powerboat outfitters will have to schedule jetbacks on specific days allocated to them rather than have flexibility to accommodate jetbacks with a certain number of days per month as needed by float outfitters. Alternative C also allocates more boat days than Alternative B providing greater flexibility for scheduling jetbacks. Powerboat outfitters who provide jetouts to locations downriver of Kirkwood will be affected since all float trips end below Kirkwood (the end of the nonmotorized section). Refer to the previous section on effects to commercial powerboat outfitters from limiting launching of inflatable watercraft for a further discussion of the effects on float outfitters who use their powerboat permit in conjunction with their float trips.

In Alternative C, the one-day float outfitters (Armacost and Luther) lose the flexibility to launch float trips every other day from Monday through Wednesday (nonmotorized period). However, they gain flexibility to schedule trips every other day Thursday through Sunday on nonmotorized weeks as long as there are unused launches on those dates from the pool. Between the two outfitters, one launch per week is eliminated during the nonmotorized weeks. During the motorized weeks, they can launch seven days a week if use is available. Launches and gross revenue will be further reduced and eventually eliminated when all launches are used by commercial multi-day and private floaters and no excess capacity exists in the pool. Refer to the previous discussion on allocation of float launches for description of unused float launches.

Launch Schedule

All float outfitters continue to operate under a limited daily use schedule as occurred in the base period in all alternatives. The two temporary use permits (Luther and Armacost) are eliminated under Alternative B eliminated associated float launches and gross revenue. Alternative C allows Luther and Armacost to operate with unused launches from the pool on four days of the week during the nonmotorized weeks and seven days per week on motorized weeks as compared to five days during the base period. Each outfitter has the flexibility to increase the number of float launches and gross revenue compared to their actual use during the base period. Although the number of available launches from the pool varies daily, the lowest year of unused launches was 1992 with 112 (20% of total private and commercial). Approximately 27% of commercial float launches were unused in 1995.

Party Size for Commercial Users

Alternative A (no-action) allows float outfitters to operate trips with up to 30 passengers. Actual use reports for ten outfitters (Wendt, Grubb, Hauptman, Howard, Hughes, Peavey, Porfily, Randle, Steen, and Stewart) showed trips with between 24 to 35 passengers during the base period.

Alternative B and C reduce party size to 24 people including guides. Gross revenue is potentially reduced from reducing the number of passengers for the ten individual outfitters who had large groups during the base period. Gross revenue effects from the loss of passengers ranges from -1% to -7% compared to the base period. Limitations to party size potentially reduce gross revenue by 5-7% for Wendt, Howard, Peavey, and Porfily and by 1-4% for Grubb, Hauptman, Hughes, Randle, Steen, and Stewart. Refer to the summary of gross revenue effects later in this chapter for more discussion.

Maximum Number of Commercial Floatcraft per Party

Alternative A (no-action) allows float outfitters to operate trips with up to 30 craft of any valid type (raft, drift, kayak, inflatable, canoe, etc.). Actual use reports for six outfitters (Wendt, Davis, Hauptman, Howard, Hughes, and Porfily) showed trips with between 10 to 17 craft during the base period. All craft type on trips with more than eight craft in a party were one-person inflatables except for Porfily who had an average of 11 rafts on some trips under a previous owner who specialized in row-your-own kayak trips.

Alternatives B and C reduce the maximum number of craft to eight per party. Gross revenue is potentially reduced from reducing the number of craft for the six individual outfitters who had large groups during the base period. Gross revenue effects from the loss of craft range from -1% to -13% compared to the base period. Porfily has the greatest potential effect to gross revenue (-13%) because his craft over the eight were rafts and held more passengers. However, the effect to Porfily is overestimated because Porfily does primarily offers multi-day raft trips compared to the previous owner who did primarily row-your-own trips that required several craft during the base period. The other five outfitters have a potential gross revenue effect of less than three percent because the inflatables only held one person on average.

Use of Kickers on Commercial Floatcraft in the Wild River

Alternative A (no-action) allows float outfitters to use kickers (outboard motors) in any section of the river to help propel rafts downriver in slack water or against headwinds. Five outfitters reported using kickers on their cargo rafts and for emergency evacuation purposes when necessary. Three of the outfitters (Randle, Hughes, and Howard) have used them in the wild section of the river.

Alternatives B and C eliminate kickers and prevent the three outfitters from using kickers in the wild river section year-round. All outfitters can continue to use kickers in the scenic section year-round. The three outfitters have to potentially buy smaller or lower profile rafts to accommodate their cargo and still float to Pittsburg Landing in relatively the same amount of time. The size and cost of rafts varies depending on the equipment already available to the outfitter, the numbers of passengers on the trip, and the conditions such as high winds and emergency needs that required the use of kickers.

Management and Coordination of Commercial Salmon River Floaters

Alternative A (no-action) allows lower Salmon River commercial floaters with party sizes up to 30 passengers and crew to continue to camp anywhere below the confluence of the Snake and Salmon Rivers. Any trip can include more than eight craft per party.

Alternatives B and C require commercial float trips entering the Snake River from the Lower Salmon River with more than 24 people to camp within the first mile below the confluence. Other options to camping exist such as obtaining a jetout to Heller Bar to complete the trip in the same day, or using kickers to reach Bear Bar 12 miles downriver (first camp location off the HCNRA). This takes several hours from the confluence.

commercial float trips entering the Snake River from the Lower Salmon River have to meet the eight craft per party limit. Over the last three years (1993-95), eight to ten companies out of 35 Lower Salmon River outfitters had an average party size between 18-24 (including guides). Two of these companies had years with an average party size of 26, and one company had an average party size of 30 in one year. Average number of passengers per party (including guides) for all Salmon River outfitters permitted to operate on the Snake River has been 15 for the last three years. The average numbers of craft are not available for these outfitters.

Assuming the average number of craft per trip for the Snake River outfitters is comparable to the Salmon River outfitters, and the average number of people per craft (3), these outfitters may have had some trips with 9-10 total craft. Limiting craft per party to eight primarily affects outfitters that accommodate groups larger than 24 people and outfitters that do row-your-own kayak trips if they continue onto the Snake River. Row-your-own trips generally have one person per inflatable kayak or 1-2 people per raft and require additional guides in kayaks or rafts for assistance through rapids as a safety precaution.

These companies may have to reconfigure their trips to meet the craft limit of eight. Some outfitters currently use larger rafts to accommodate the same number of people in the groups, tie rafts together or into pod formations upon reaching the confluence and motor out with a kicker, complete the trip at the confluence, take a jetout to Heller Bar off the HCNRA or upriver to Pittsburg Landing. If the row-your-own kayak companies wanted to continue their trip on the Snake River, they have to buy 2-3 additional rafts (approximately $3,000 - $6,500 each) possibly an outboard motor to carry the deflated kayaks and extra passengers who were in the rafts from the confluence downriver. This requires hiring 2-3 additional guides at a cost of approximately $100/day per guide for an average four day trip.

Snake River powerboat outfitters have historically provided jetout services to Heller Bar and jetback services to Pittsburg Landing for the Lower Salmon outfitters. This service can continue within allocated boat days for each outfitter. Additional scheduling and coordination may be required with the powerboat outfitters to find one that can accommodate their trip dates within their allocation. Whether powerboat outfitters continue this service due to limitations on their boat days is unknown. The allocated boat days provide 8 commercial powerboat launches per day under Alternative B and 8.8 commercial powerboat launches per day in Alternative C in this section of the river providing the opportunity for all of the powerboat outfitters except Armacost to accommodate jetouts. Float outfitters can also continue to float to the HCNRA boundary and have unlimited access to jetouts at that point.

Gross Revenue Effects

During the base period, average annual gross revenue totalled $884,634 for all float outfitters. Total revenue ranged from a high of $1,194,994 in 1995 to a low of $759,758 in 1988. Average revenue for the period 1993-95 totalled $1,069,578. The highest year of revenue for eight outfitters (Davis, Grubb, Hughes, Peavey, Peer, Steen, Stewart, and Armacost) was reported in the period 1993-95. The other eight (Wendt, Hauptman, Howard, Koch B&F, Porfily, Randle, Steele, and Luther) reported the highest revenue during the base period.

Five outfitters (Davis, Grubb, Hughes, Peavey, and Porfily) reported their highest year of revenue in 1995. Individual gross revenues ranged from a low of $1,031 (Luther) to a high of $185,201 (Hughes) during the base period, and a low of $458 (Luther) to a high of $284,901 (Hughes) from 1993 to 1995. Under Alternative A (no-action), gross revenues will continue to fluctuate as a result of a variety of factors including business turnover, customer demands, marketing, weather conditions, river conditions, prices, individual owner's business ability, etc.

Gross revenues were reported for the entire year by each outfitter. Assuming the greater proportion of passengers and days spent on the river occurred in the primary season, gross revenue associated with each primary season launch, passenger, and passenger day was determined for each outfitter. Approximately 16 launches was recorded per year in the secondary season during the base period.

The resulting relationship between revenue per launch, revenue per passenger, and revenue per craft was used to determine total gross revenue for Alternatives B and C. Refer to Table III-11 for a description of annual gross revenue during the base period, 1993-95, for each outfitter, and alternative. Alternative A represents average gross revenue during the base period. The gross revenue effects account for primary season launches used historically, the total launches allocated, the effects of limiting party sizes to 24, and the effects of limiting the number of craft to eight. Comparing the total gross revenue under the alternatives to the 1988-92 and the 1993-95 average gross revenue provides a relative indication of the highest or lowest point of the potential change in gross revenue. Also, the 1993-95 average gross revenue represents a different relationship between revenue, launches, passengers, and craft numbers than examined for the base period primarily due to changes in how many trips outfitters took to each section of the river, the number of passengers and days per trip, and the prices they charged. The two points of comparison provide a range of potential effects to individual outfitters.

Alternatives B and C annual gross revenue totals $812,972 and $844,288, an 8% and 5% decrease from the base period, respectively. All sixteen outfitters potentially experience a decrease in annual gross revenue. Armacost's and Luther's gross revenue decreases the most (-100%) with the elimination of their one-day permits under Alternative B. Other decreases potentially occur as follows: Porfily (-20%), Wendt (-8%), Hughes (-7%), Howard (-6%), Hauptman and Peavey (-5%), Steen (-4%), Randle (-3%), Grubb (-2%), Davis and Stewart (-1%). Koch B&F, Peer, and Steele maintain the same level of gross revenue.

Compared to the 1993-95 average gross revenue, under Alternatives B and C, annual gross revenue decreases by 24% and 21%, respectively. Eleven outfitters potentially experience a decrease in annual gross revenue. Armacost and Luther's gross revenue decreases the most (-100%) with the elimination of their permits under Alternative B, followed by Steen (-49%), Hughes (-43%), Grubb (-43%), Stewart (-38%), Peavey (-34%), Davis (-28%), Hauptman (-7%), Porfily (-6%), and Howard (-3%).

The gross revenue effects described for Alternatives B and C assume the average primary season float launches actually used during the base period (1988-92) will continue to be used. However, all outfitters have decreased or increased the number of launches they've used compared to 1993-94 as described previously in the trend analysis. The gross revenue effects assume secondary season launches remain constant with the level achieved during the base period. Data is unavailable on secondary season use to determine any trend. Actual float launches used depends on a variety of factors, including consumer preferences and disposable income levels, outfitter marketing ability, weather, and water flow levels.

In Alternatives B and C, assuming all of the outfitters could sell every allocated float launch at the 1993-94 average revenue per launch, the annual gross revenue would total $1,285,756, a 45% increase from the base period and a 20% increase from the 1993-95 period. Effects to individual outfitters could range from a high of 138% to Davis to a decrease of 27% for Peer compared to the base period. Compared to 1993-95, individual effects could range from a high of 273% to Koch B&F to a decrease of 11 % for Grubb. The gross revenue effects do not include any launches potentially gained from the commercial pool which tends to narrow the range of effects described. Some outfitters show a decrease in gross revenue if they used all of their launches because they earned less revenue per launch in the 1993-94 period as compared to the base period.

The economic analysis file contains further details and descriptions of economic effects and assumptions for each outfitter.

Table III-11
Summary of Annual Gross Revenue Effects (1996$)
(Commercial Float Outfitters)

Outfitter	Base Period Average Alt. A	Average Gross Revenue 1993-95	Percent change from Base Period	Percent change from 1993-95	Gross Revenue Alt. B (1)	Percent change from Base Period	Percent change from 1993-95	Gross Revenue Alt. C (1)	Percent change from Base Period	Percent change from 1993-95	Gross Revenue Alt. A if All Launches Used (2)	Percent change from Base Period	Percent change from 1993-95
Multi-day Trips:													
Chang	$91,574	$51,908	0%	-43%	$84,113	-8%	62%	$84,113	-8%	62%	$72,964	-20%	41%
Davis	$23,309	$32,249	0%	38%	$23,106	-1%	-28%	$23,106	-1%	-28%	$55,407	138%	72%
Grubb	$81,822	$139,903	0%	71%	$80,003	-2%	-43%	$80,003	-2%	-43%	$123,870	51%	-11%
Hauptman	$125,489	$129,105	0%	3%	$119,625	-5%	-7%	$119,625	-5%	-7%	$151,697	21%	17%
Howard	$66,888	$64,924	0%	-3%	$62,974	-6%	-3%	$62,974	-6%	-3%	$84,160	26%	30%
Hughes	$156,283	$255,368	0%	63%	$145,452	-7%	-43%	$145,452	-7%	-43%	$252,631	62%	-1%
Koch B&F	$27,211	$11,716	0%	-57%	$27,211	0%	132%	$27,211	0%	132%	$43,684	61%	273%
Peavey	$49,934	$71,625	0%	43%	$47,437	-5%	-34%	$47,437	-5%	-34%	$102,694	106%	43%
Peer	$21,433	$14,655	0%	-32%	$21,433	0%	46%	$21,433	0%	46%	$15,580	-27%	6%
Porfily	$18,590	$15,905	0%	-14%	$14,909	-20%	-6%	$14,909	-20%	-6%	$32,510	75%	104%
Randle	$57,502	$39,176	0%	-32%	$55,617	-3%	42%	$55,617	-3%	42%	$62,391	9%	59%
Steele	$32,059	$17,859	0%	-44%	$32,059	0%	80%	$32,059	0%	80%	$50,005	56%	180%
Steen	$31,371	$59,119	0%	88%	$30,063	-4%	-49%	$30,063	-4%	-49%	$64,973	107%	10%
Stewart	$69,854	$112,033	0%	60%	$68,970	-1%	-38%	$68,970	-1%	-38%	$116,783	67%	4%
One-day Trips:													
Armacost 1 dy	$27,244	$53,575	0%	97%	$0	-100%	-100%	$27,244	0%	-49%	$55,948	105%	4%
Luther 1 dy	$4,072	$458	0%	-89%	$0	-100%	-100%	44,072	0%	789%	$458	-89%	-0%
TOTALS:	$884,634	$1,069,578	0%	21%	$812,972	-8%	-24%	$844,288	-5%	-21%	$1,285,756	45%	20%

1. Based on 1988-92 average revenue per launch and average number of launches used during the base period.
2. Based on 1993-94 average revenue per launch and total number of launches allocated.

ASSESSMENT OF COMMERCIAL FLOAT OPERATOR CAPABILITY TO ADAPT TO CHANGE

The alternative's impacts on the short-term and long-term business health of the commercial floatboat industry can be assessed by looking at the ability of the industry to maintain or expand existing revenues given the imposed limitations. This analysis looks at the effects of the alternatives on each outfitter and the available capacity in unused launch dates. Table III-12 identifies the percent changes in passengers, number of craft, and decreases in launches by outfitter. The available capacity for additional float trips to mitigate the effects of the alternatives is also displayed by comparing the number of launches available to actual use in the base period and the 1993 to 1994 average.

TABLE III-12
IMPACTS OF ACTION ALTERNATIVES ON FLOAT OUTFITTERS

Outfitter	Alt. B & C Passengers Change	Alt B & C Floatcraft Change	Alt B Only Launch Change	Alt B & C Base-Period Unused Capacity	Alt B & C 1993-94 Unused Capacity
Multi-day Trips					
Wendt	-7%	-1%		21%	50%
Davis		-1%		43%	50%
Grubb	-2%			21%	7%
Hauptman	-2%	-3%		19%	24%
Howard	-5%	-1%		21%	21%
Hughes	-4%	-3%		19%	5%
Koch B&F				-14%	64%
Peavey	-5%			14%	43%
Peer				64%	14%
Porfily	-7%	-13%		57%	50%
Randle	-3%			29%	14%
Steele				29%	64%
Steen	-4%			36%	14%
Stewart	-1%			0%	-7%
One-day Trips					
Armacost			-100%	21%	0%
Luther			-100%	79%	92%

The alternatives appear to offer most multi-day outfitters the capability to add launches within present capacity limits in order to mitigate reductions due to limits on the number of float craft and party size. It also appears that most have the ability to experience growth into the foreseeable future. The exception to this group are Hughes and Stewart. If the changes for Hughes are cumulative, then the unused capacity of the 1993 to 1994 period will be completely filled. This business could incur actual reductions in gross revenue and have no capacity for growth. Stewart is operating at the launch limit so that reductions in gross revenue are likely and growth within this business is not possible. Note that negative numbers in capacity reflect where outfitters have picked up unused launches from the pool in addition to their allocation (Stewart) or ran trips below Rush Creek where float launches were not limited (Koch).

Armacost and Luther, under Alternative B lose the temporary permits and all business associated with the permits. Alternative C effects vary and are dependent on capacity not used by other commercial and private parties. For Armacost the best result is limited growth and the worst result is that all available launch dates are used by other commercial and private parties. Armacost loses this business activity. Luther has the capacity to expand the business under the most positive outcome, and like Armacost, lose all one-day float trips under the worst outcome. It is likely that Armacost will see this business activity erode over time. Luther can expand in the near future and then lose this business activity later. Based on float launch utilization trends , it is likely that there will be some level of temporary one-day float trips that will continue in the short-term (refer to Table III-10).

CUMULATIVE IMPACTS

These potential impacts on Luther, Armacost, and Koch can be additive to the losses in revenue from the powerboat business activity. The analysis for Luther and Koch showed reduced capability to adapt to changes to the power boat limitations; however, the float business only generates about 2% of Luther's total gross revenue and 3% of Koch's total gross revenue. While the analysis showed Armacost was better in adapting to change, the loss of the floatboat activity combined with the losses in powerboat gross revenues approaches a 50% loss in average gross revenue compared to the base period under Alternative B, and a 25% loss over time under Alternative C.

SUMMARY OF ECONOMIC EFFECTS

Refer to Table III-13 below for a summary of changes to boat days and launches, total gross revenue, and scheduling·flexibility by outfitter for each alternative.

Table III-13
Summary of Economic Effects
Changes to Boat Days/Launches, Gross Revenue, and Scheduling Flexibility

Outfitter	Alternative A			Alternative B			Alternative C		
Commercial Powerboat	**Average Boat Days/ Launches**	**Average Gross Revenues**	**Scheduling Flexibility**	**Change in Boat Days/ Launches**	**Change in Gross Revenues**	**Scheduling Flexibility**	**Change in Boat Days/ Launches**	**Change in Gross Revenues**	**Schedu Flexibi**
Armacost	387	$144,961	H	-163	-35%	L	10	-12%	M
Koch HBE	228	$434,595	H	-6	-1%	L	-4	-2%	M
Koch IRN	62	$159,787	H	16	-10%	L	23	-7%	M
Koch RN	111	$224,482	H	9	-15%	L	7	-12%	M
Luther	131	$172,961	H	8	-7%	L	8	0%	M
Alboucq	75	$76,879	H	-2	-16%	L	10	-1%	M
Odegaard	50	$31,819	H	8	-4%	L	35	37%	M
Riddle	37	$66,817	H	2	-5%	L	6	6%	M
Taylor	64	$166,983	H	1	5%	L	21	9%	M
Anderson	4	$10,104	H	2	5%	L	2	7%	M
Bentz	8	$9,700	H	3	15%	L	3	16%	M
Bream	6	$4,034	H	1	7%	L	1	7%	M
Eddins	5	$7,121	H	1	1%	L	1	3%	M
Lamm	52	$67,382	H	-52	-100%	-	-52	-100%	-
Maxwell	2	$42,341	H	2	6%	L	2	6%	M
Zaplfe	4	$41,868	H	2	4%	L	2	4%	M
Cook	20	$25,202	H	4	7%	L	11	17%	M
Whitten	30	$28,435	H	1	8%	L	10	19%	M
Woods	7	$6,484	H	-	-13%	L	2	-11%	M
Totals:	1,283	$1,721,955	H	-75	-11%	L	98	-5%	M
Commercial Float									
Wendt	11	$91,574	H	-	-8%	L	-	-8%	
Davis	8	$23,309	H	-	-1%	L	-	-1%	M
Grubb	11	$81,822	H	-	-2%	L	-	-2%	M
Hauptman	17	$125,489	H	-	-5%	L	-	-5%	M
Howard	11	$66,888	H	-	-6%	L	-	-6%	M
Hughes	17	$156,283	H	-	-7%	L	-	-7%	M
Koch B&F	16	$27,211	H	-	-	L	-	-	M
Peavey	12	$49,934	H	-	-5%	L	-	-5%	M
Peer	5	$21,433	H	-	-	L	-	-	M
Porlily	6	$18,590	H	-	-20%	L	-	-20%	M
Randle	32	$57,502	H	-	-3%	L	-	-3%	M
Steele	10	$32,059	H	-	-	L	-	-	M
Steen	9	$31,371	H	-	-4%	L	-	-4%	M
Stewart	14	$69,854	H	-	-1%	L	-	-1%	M
Armacost	30	$27,244	H	-30	-100%	-	-	-	M
Luther	8	$4,072	H	-8	-100%	-	-	-	M
Totals:	217	$884,634	H	-38	-8%	L	-	-5%	M

(1) Alternatives B and C are compared to Alternative A (Base Period) to determine changes in boat days or float launches, gross revenue, and scheduling flexibility

(2) Scheduling Flexibility: H= High; M = Medium; L = Low

ALTERNATIVE EFFECTS ON JOBS AND INCOME IN PORTAL COMMUNITIES

The changes in revenue earned by the commercial powerboat outfitters and the changing numbers of recreationists resulting from implementation of the action alternatives also impact jobs and income. Commercial outfitters provide jobs and income directly, as well as indirectly, through their purchases of equipment and supplies. Recreationists spend money, other than outfitter guide fees, primarily on lodging, food, gas, and other retail and services purchases. The alternative effects relating to jobs and income, and on key industries are disclosed on a multiple county basis in the FEIS. A recent study funded by the Idaho State Legislature, *A Study of the Effects of Changing Federal Timber Policies on Rural Communities in Northcentral Idaho* (Robinson, et. al., 1996), provides economic impact assessment models useful for determining the effects of changes in outfitter and recreationist expenditures on the Lewiston-Clarkston and Riggins portal communities. There is no community level model for the Oxbow area, however, the Riggins model can be used to identify the relative magnitude of impacts on that area.

The Riggins community includes the changes to Cook, Whitten, and Woods; the Lewiston-Clarkston communities include changes to all of the Cache Creek portal outfitters; and the Oxbow community includes changes to Armacost.

The alternative impacts are assessed using the differences in revenue and services compared to the 1993-94 averages. The differences in outfitter gross revenue are considered changes in outfitter spending in the local communities. Recreation related effects are based on a recent survey funded by the Lolo National Forest for the Salmon River that identifies spending patterns within 40 miles of portals. Changes in service days were converted into spending changes in the local portal communities. These changes are then compared to the income and employment base for each portal community that occurred in 1994. Table III-14 and III-15 identify the jobs and income effects of the action alternatives on Riggins and Lewiston-Clarkston, respectively.

A note of caution against comparing the alternative changes in employment to the 1994 levels for the outfitter guide industry. This industry was modified in the community models based on information contained in the *Idaho Outfitter and Guides Economic Contribution to the Idaho Economy, 1993* (Leidner, et. al., 1995). The modification was done to more accurately portray changes to the river-based outfitter guide segment of the broader amusement and recreation industry. The 1994 levels contain the broader average.

Table III-14
Riggins Income and Employment Effects By Alternative
(Income is in thousands of 1994 dollars - Employment is in jobs.)

Industry	Income 1994	Income Alt B	Income Alt C	Employment 1994	Employment Alt B	Employment Alt C
Agriculture & Ag Services	774	-*	-*	72	-*	-*
Mining	1,079	-*	-*	25	-*	-*
Construction	674	-*	-*	38	-*	-*
Manufacturing	753	0	0	18	0	0
Transportation & Communications	330	-*	-*	17	-*	-*
Retail & Wholesale Trade	886	-1	-1	69	-*	-*
Finance, Ins, & Real Estate	11	-*	-*	11	-*	-*
Motels & Eating-Drinking Places	1,209	-6	-5	127	-1	-*
Outfitter Guides	480	-2	-1	44	-1	-*
Services	278	-*	-*	23	-*	-*
Government	3407	-*	-*	144	-*	-*
Total	9,881	-11	-7	588	-2	-1

* = less than $1,000
Individual entries may not sum to totals due to rounding.

The alternative impacts to the Riggins community are small with less than 1% total change in income and in jobs for the short-term. The largest impact is a -2% change to outfitter guide employment under Alternative B. The primary effect of the alternatives is a limit to growth in the tourism industries related to commercial outfitters. Support businesses that are making capital investments to accommodate future growth in the commercial powerboat business will be more severely affected.

Table III-15
Lewiston-Clarkston Income and Employment Effects By Alternative
(Income is in thousands of 1994 dollars - Employment is in jobs.)

Industry	Income 1994	Income Alt B	Income Alt C	Employment 1994	Employment Alt B	Employment Alt C
Agriculture & Ag Services	11,335	-1	-1	642	-*	-*
Mining	1,584	-*	-*	57	-*	-*
Construction	28,195	-11	-10	918	-*	-*
Manufacturing	128,020	-5	-4	3,148	-*	-*
Transportation & Communications	26,433	-7	-6	906	-*	-*
Retail & Wholesale Trade	55,871	-24	-21	3,564	-2	-2
Finance, Ins, & Real Estate	22,014	-14	-12	1,174	-1	-1
Motels & Eating-Drinking Places	12,268	-42	-34	1,262	-4	-3
Outfitter Guides	1,296	-156	-140	125	-49	-44
Services	88,052	-41	-36	4,124	-2	-2
Government	54,196	-6	-6	2,304	-*	-*
Total	**429,264**	**-307**	**-270**	**18,226**	-59	-52

* = less than $1,000.
Individual entries may not sum to totals due to rounding.

The alternative impacts to the Lewiston-Clarkston communities are small with less than 1% change in income and in jobs for the short-term. The industry that incurs large impacts is the outfitter guide industry where income is reduce by 12% under Alternative B, and 11% under Alternative C. The effects on jobs in the outfitter industry show decreases of 49 and 44 jobs in Alternative B and Alternative C, respectively. An additional effect of the alternatives is limits to growth in the tourism industries related to commercial outfitters. Similar to Riggins, support businesses that are making capital investments to accommodate future growth in the commercial powerboat business will be more severely affected.

Although a community model for the Oxbow area is not available, the Riggins model is used to simulate potential impacts. Actual impacts should generally be less since the tourism and support industry levels of development compared to Riggins are generally less. Given the changes in Armacost gross revenue and service days for the commercial powerboat business, changes in outfitter guide income is $52,000 less under Alternative B and $40,000 less under Alternative C. Outfitter jobs decrease by 14 and 10 in Alternatives B and C, respectively. Community-wide there is a potential decrease of $190,000 in income under Alternative B and $122,000 under Alternative C. Job losses are 25 and 17 for Alternatives B and C, respectively. Given the elimination of Luther's and Armacost's permits under Alternative B, the job and income effects could be higher than displayed in Table III-14 and Table III-15.

The Oxbow area (including Halfway) is likely to have additional negative impacts do to potential reductions in the floatboat business in the future as unused float launch days become less available to Armacost and Luther. These losses and the limits on future river-based outfitter guide activity affect related tourism and support industries. Due to excess capacity in float launches as displayed in Table III-10, no additional impacts to communities are portrayed for the remaining float outfitters.

References:

Leidner, Stuart R. and E. Krumpe. 1993. Idaho Outfitters and Guides Economic Contribution to the Idaho Economy. University of Idaho.

Robison, M. Henry; C.W. McKetta; and S.S. Peterson. 1996. A Study of the Effects of Changing Federal Policies on Rural Communities in North Central Idaho. University of Idaho.

CUMULATIVE EFFECTS

In the reasonably foreseeable future, potential effects may occur from restrictions on outfitters from management planning on the Salmon River, although the effects are not known at this time.

Resource dependent communities are already experiencing reductions in their economies due to reductions in timber supplies.

Decisions resulting from this EA could lessen economic growth in tourism associated industries (e.g. lodging on Salmon River).

Placing use restrictions and allocations on the Snake River may displace recreation use to other regional rivers.

No additional cumulative effects associated with this action have been identified.

POTENTIAL CONFLICTS WITH PLANS AND POLICIES OF OTHER JURISDICTIONS

There would be no conflicts with plans and policies of other jurisdictions which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see pages IV-139 and 140) associated with the implementation of any alternative analyzed in this EA. Alternatives described in this EA were reviewed for consistency with other plans and policies. All alternatives were determined to be consistent with the 1990 Resource Planning Act and the Oregon and Idaho Departments of Environmental Quality.

PROBABLE ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

There would be no adverse environmental effects that cannot be avoided which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-141) associated with the implementation of any alternative analyzed in this EA.

RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

There would be no short-term uses adversely affecting long-term site productivity which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-141) associated with the implementation of any alternative analyzed in this EA.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

There would be no irreversible or irretrievaable commitment of resources which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-142) associated with the implementation of any alternative analyzed in this EA.

SPECIFICALLY REQUIRED DISCLOSURES

EFFECTS OF ALTERNATIVES ON THREATENED AND ENDANGERED SPECIES AND CRITICAL HABITAT

There would be no adverse effects on threatened or endangered species or their critical habitat (see Wild and Scenic Snake River Plan FEIS page IV-143) associated with the implementation of any alternative analyzed in this EA.

EFFECTS OF ALTERNATIVES ON PRIME FARM LAND, RANGE LAND, AND FOREST LAND

... alternatives are in keeping with the intent of Secretary of Agriculture Memorandum 1827 (reference analysis file) for protection of prime farm land, rangeland, and forest land. Regardless of the alternative, the wild and scenic river corridor will be managed with a sensitivity to the effects which their management may have on prime lands, whether the prime lands lie within private or public ownership.

ENERGY REQUIREMENTS OF ALTERNATIVES

There would be no unusual energy requirements which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-143) associated with the implementation of any alternative analyzed in this EA.

EFFECTS OF ALTERNATIVES ON TREATY OR OTHER RESERVED RIGHTS OF INDIAN TRIBES AND INDIVIDUALS

There would be no adverse environmental effects on treaty rights of Native American Tribes which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-143) associated with the implementation of any alternative analyzed in this EA.

EFFECTS OF ALTERNATIVES ON CIVIL RIGHTS, WOMEN, AND MINORITIES

There would be no adverse environmental effects on civil rights, women and minorities which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-144) associated with the implementation of any alternative analyzed in this EA.

EFFECTS OF ALTERNATIVES ON WETLANDS AND FLOODPLAINS

There would be no adverse environmental effects on wetlands and flood plains which have not already been identified in the FEIS for the Forest Plan or the Wild and Scenic Snake River Plan FEIS (see page IV-145) associated with the implementation of any alternative analyzed in this EA.