



Visitor Use Monitoring in the Southwest Alaska Network



Background

Visitor use information is integral to evaluating impacts human activities have on ecosystem change in the NPS Alaska Region. The majority of visitor use data for the Southwest Alaska Network (SWAN) is obtained through an NPS commercial use authorization (CUA) reporting system that was established in 2005. Under this system commercial use operators with NPS contracts submit annual CUA report forms detailing a variety of visitor data. This CUA visitor data, and additional permit information from the NPS Office of Concessions gets archived in the CUA Activity Report database, a Microsoft® Access database currently managed by SWAN. Tabular visitor use statistics are then generated through database reporting.

- NPS OFFICE OF CONCESSIONS**
- Permit information
- CUA ACTIVITY REPORT FORMS**
- Location of visit(s)
 - Duration of visit(s)
 - Visitor quantities
 - Visitor use activities
 - Assessed park fees
 - Other data

Southwest Alaska Network Inventory and Monitoring

Visitor Use Monitoring
Commercial Use Authorization (CUA)
Activity Report and Bill of Collection Report

Enter and View Data Forms

Enter CUA Activity Report and Bill of Collection Information

View CUA Activity Reports

Select CUA Summary

View selected business:

CUA0209 - Katmai Air & Kulk Lodge

View by Name

View Records for this CUA

Reports

Multi-Year User Days by Location

Multi-Year User Days by Operator

Park Location	2008	2009	2010
Chitilabine River	84	7	78
Chitina Bay	722	781	874
Crescent Lake	699	1203	1043
Kigik	176	20	53
Kigik River		80	17
Katrahkuna Lake	17	82	41
Lachhona Lake	6	6	5
Lake Clark (Isle)	224	178	228
Mulchana River	5		
Polly Creek	14		
Sheffer Creek	49		68
Silver Salmon Creek	2261	1690	2187
Snipe Lake	8	4	13
Sunset Lake	2		1
Tanalian Falls	12	9	
Tatimna Lake	218	34	13
Tatimna River	99	34	252
Tatimna Lake	233	89	97
Thalita River	22	16	20
Tungsten Lake	348	375	261
Tweedie Bay	11	2	34
Tom Lakes	422	438	492
Tom Lakes	5	4	10



In March 2009 a pilot project was initiated to integrate visitor use data from the CUA Activity Report database into ESRI® ArcGIS (GIS) for improved visualization and evaluation. A regional data model was designed and implemented and spatial boundaries representing current or potential areas of visitation were developed. Visitor use activities in SWAN are predominately water based. For this reason, best available watershed delineations were used when suitable to define spatial boundaries. However, supplemental drainage basin linework (derived from the ESRI® ArcToolbox spatial analyst hydrology toolset and best available DEM) and simple proximity buffers were also incorporated.

Following boundary definition a spatial join was performed to fully integrate data from the CUA Activity Report database into GIS. Through this process, each visitor use record in the database is matched to its corresponding spatial boundary by location name. A large percentage of visitor use data can be assimilated into GIS per this strategy. However, visitor use records with non-matching or non-specific location names cannot be incorporated. Visitor use statistics generated through database reporting may be easily visualized in GIS.



Visitation boundaries developed in 2009 for LACL and KATM/ALAG. Areas with known CUA visitation are depicted in beige. Areas with no current CUA visitation are depicted in gray.

Next Steps for Visitor Use Monitoring

- Data collection and management issues associated with the current NPS CUA reporting system challenge visitor use monitoring. Strategic efforts are underway to resolve these issues, and include:
- Streamlining NPS data entry in the CUA Activity Report database by consolidating the data entry form, expanding computer calculated fields, improving record submission functionality, and mandating Microsoft® Access training for all NPS data entry personnel.
 - Improving existing QA/QC procedures.
 - Assigning a single NPS Data Manager to data extraction and data review.
 - Cleaning up existing visitor use data by removing unused or orphan items from the database and correcting identifiable data entry errors.
 - Revising the hard-copy CUA Activity Report forms provided to commercial use operators.
 - Developing and promoting the use of an online CUA reporting system.

Significant steps have already been accomplished towards the simplification, cleanup and revision of the CUA submission process. These include draft revisions to CUA hard-copy report forms and to the database main entry form; the removal of unused tables, reports, queries, and forms from the database; and the completion of technical reports that detail specific locations of error remaining in the database. With these tasks complete, the most-time consuming aspects of this improvement process are over. Completion of all remaining resolutions will help ensure that the NPS Alaska Region, including the SWAN maintains solid defensible visitor use data for the future in a manner that is relevant to the parks and can be sensibly evaluated by the NPS and other agencies.

National Park Service		Katmai National Park and Preserve									
Commercial Use Authorization (CUA)		Agnagnak Wild River									
Activity Report and Bill of Collection		Total Days									
Business:		Total Clients									
CUA Num:		Total Payment									
Check here if you did not operate: <input type="checkbox"/>											
Katmai National Park & Preserve and Agnagnak Wild River											
1) Start Date	2) End Date	3) Total # of Days	4) Total # of Clients	5) Total Fee (\$)	6) Total # of Collections	7) Total # of People	8) Unweighted Overweight Drop off? (Yes/No)	9) Choose location from drop down list (use multiple boxes if more than 1 location in same day)	10) Choose seconcommon Park location from drop down list	11) Choose seconcommon Park location from drop down list	12) Choose seconcommon Park location from drop down list
8/11/2011	8/14/2011	4	10	\$240	2	12	<input checked="" type="checkbox"/>	Lake Camp	Br	Big River	Br
8/15/2011	8/15/2011	1	5	\$30.00	1	6	<input type="checkbox"/>	Maggor Creek	Ph	Hario Bay	Br

Example of a revised CUA report form for potential online data entry.

Southwest Alaska Network Inventory and Monitoring

Commercial Use Authorization (CUA) Database

CUA and Report Information

Form Name: [Dropdown]

CUA ID: [Dropdown]

Report Year: [Dropdown]

Report Use Dates

Start Date: [Dropdown] End Date: [Dropdown]

Clients: [Dropdown] # Boats: [Dropdown] Total # People: [Dropdown] Total # Days: [Dropdown]

Submitted: [Dropdown]

Location and Activity Details

Park Code: [Dropdown] Location: [Dropdown] Activity: [Dropdown]

Submit

Revised main entry form for CUA Activity Report database.

