## ATTACHMENT 14-1

REVIEW OF COMMUNITIES AND SUBSISTENCE USE AREAS IN THE SUSITNA RIVER WATERSHED

# Review of Communities and Subsistence Use Areas in the Susitna River Watershed 

The study team reviewed the communities included in the Alaska Department of Fish and Game (ADF\&G) scope of work and in the subsistence data gap analysis prepared by Northern Land Use Research, Inc. (NLUR). In addition, the study team identified four other communities that are located, or whose use areas are located, in the Susitna River watershed. These include Chickaloon, Eklutna, Healy, and Lake Louise. Because subsistence use area study is available for the Western Susitna Basin (communities not specified), this region was included in the review. The study team reviewed a total of 42 communities (including a regional use area for the Western Susitna Basin and dispersed households along the Parks Highway and Denali Highway). These communities are listed in Table 1 and depicted on Map 1. The study team reviewed each community for its proximity to the Susitna River watershed, and for the proximity of the community's subsistence use areas (if available) to the Susitna River watershed. In addition, the study team identified whether recent (last three year) harvest data are available for each community. As noted in Table 1, harvest data as collected by ADF\&G do not provide all subsistence baseline indicators that are important for characterizing baseline subsistence uses or assessing potential impacts on subsistence uses. Additional baseline indicators not generally available through ADF\&G harvest data include multi-year subsistence use areas, comprehensive seasonal round, transportation methods, trip duration, trip frequency, and traditional knowledge including harvester observations of resource change.

As shown in Table 1, the study team identified 14 communities located within the Susitna River watershed, and 18 communities whose use areas are located within the Susitna River watershed. Subsistence use area data are not available for 19 communities. A total of 30 communities are either located within the Susitna River watershed or have use areas that are located within the Susitna River watershed. Map 1 counts do not include the Western Susitna Basin use areas, Denali Highway dispersed households, and Parks Highway dispersed households.

Recent (last three year) harvest data are currently available for only 11 of the 42 communities in Table 1. In their scope of work, ADF\&G included communities that are not located in the Susitna River watershed and whose use areas are not included in the Susitna River watershed. These include Chistochina, Mentasta, Nabesna, and Slana. In addition, ADF\&G included communities that are not located in the Sustina River watershed for which no use area data are available. These include Copperville, Nelchina, Silver Springs, Tazlina, Tolsona, and Willow Creek.

In their subsistence data gap analysis, NLUR included communities that are not located in the Susitna River watershed and whose use areas are not included in the Susitna River watershed. These include Chisana, Chistochina, Mentasta, and Slana. In addition, NLUR included communities that are not located in the Susitna River watershed for which no use area data are available. These include Copperville, Palmer, Silver Springs, and Tazlina.

Table 1. Communities and Subsistence Use Areas in the Susitna River Watershed

|  | Community | Reason for Study Community Consideration |  |  | Proximity to Susitna River Watershed |  |  |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Harvest Data } \\ \text { Last } 3 \text { Years } \\ (2009 \text { or Later) })^{1} \\ \hline \end{array} \\ \hline \end{array}$ | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { ADF\&G } \\ & \text { sow } \end{aligned}$ | NLUR Data <br> Gap | Added Based on Community or Use Area in Watershed | Community in Watershed | Approximate <br> Distance (in Miles) of <br> Community from <br> Watershed | Use Area in Watershed | Approximate <br> Distance (in Miles) of <br> Use Area from <br> Watershed | Community and/or Use Area in Watershed |  |  |
|  | Beluga | x |  |  |  | 11 | x | 0 | x |  |  |
|  | Cantwell | x | x |  |  | 5 | x | 0 | x |  |  |
|  | Chase | $\times$ | $\times$ |  | x | 0 | No Data | No Data | $x$ |  |  |
|  | Chickaloon |  |  | x |  | 14 | x | 0 | $\times$ |  |  |
|  | Chisana |  | $x$ |  |  | 143 |  | 95 |  |  |  |
|  | Chistochina | x | x |  |  | 53 |  | 25 |  | x |  |
|  | Chitina | x |  |  |  | 85 | x | 0 | x | x |  |
|  | Chulitna |  | x |  | $\times$ | 0 | No Data | No Data | x |  |  |
|  | Copper Center | $x$ | x |  |  | 45 | x | 0 | x | $\times$ |  |
| 10 | Copperville | x | x |  |  | 35 | No Data | No Data | No Data |  |  |
| 11 | Denali Hwy Households \& Lodges |  | x |  | x | n/a | No Data | No Data | x |  | Portion of Denali Highway is in watershed. |
| 12 | Eklutna |  |  | x |  | 9 | x | 0 | x |  |  |
| 13 | Gakona | x | x |  |  | 35 | x | 0 | x | x |  |
| 14 | Glennallen | x | x |  |  | 30 | $x$ | 0 | x |  |  |
| 15 | Gold Creek |  | x |  | x | 0 | No Data | No Data | x |  |  |
| 16 | Gulkana | $\times$ | x |  |  | 35 | x | 0 | x |  |  |
| 17 | Healy |  |  | x |  | 32 | x | 0 | x |  |  |
| 18 | Hurricane/Broad Pass |  | $\times$ |  | $\times$ | 0 | No Data | No Data | x |  |  |
| 19 | Kenny Lake | $\times$ |  |  |  | 62 | x | 0 | x | $x$ |  |
| 20 | Lake Louise |  |  | x | x | 0 | x | 0 | x |  |  |
| 21 | McCarthy | x | x |  |  | 127 | x | 0 | x | x |  |
| 22 | Mentasta | x | x |  |  | 71 |  | 52 |  | x |  |
| 23 | Nabesna | x |  |  |  | 107 |  | 52 |  | x |  |
| 24 | Nelchina | x |  |  |  | 10 | No Data | No Data | No Data |  |  |
| 25 | Palmer |  | $\times$ |  |  |  | No Data | No Data | No Data |  |  |
| 26 | Parks Hwy Dispersed Households |  | x |  | x | n/a | No Data | No Data | x |  | Parks Highway transects watershed |
| 27 | Paxson | x | x |  |  | 23 | $\times$ | 0 | $\times$ |  |  |
| 28 | Petersville |  | x |  | $x$ | 0 | No Data | No Data | x |  |  |
| 29 | Silver Springs | $x$ | x |  |  | 37 | No Data | No Data | No Data | x |  |
| 30 | Skwentna | x |  |  | $\times$ | 0 | x | 0 | x |  | Use Areas for Upper Yentna |
| 31 | Slana | x | x |  |  | 70 |  | 42 |  | $\times$ |  |
| 32 | Susitna | x |  |  | $x$ | 0 | No Data | No Data | $x$ |  |  |
| 33 | Talkeetna |  | x |  | x | 0 | No Data | No Data | x |  |  |
| 34 | Tazlina | x | x |  |  | 37 | No Data | No Data | No Data |  |  |
| 35 | Tolsona | x |  |  |  | 14 | No Data | No Data | No Data |  |  |
| 36 | Tonsina | x |  |  |  | 56 | x | 0 | x |  |  |
| 37 | Trapper Creek |  | $\times$ |  | $\times$ | 0 | No Data | No Data | x |  |  |
| 38 | Tyonek | $\times$ |  |  |  | 17 | x | 0 | x |  |  |
| 39 | Wasilla |  | x |  | x | 0 | No Data | No Data | x |  |  |
| 40 | Western Susitna Basin |  |  | $\times$ | n /a | n/a | x | 0 | x |  | Use area data are not provided at a communityspecific level |
| 41 | Willow |  | x |  | x | 0 | No Data | No Data | x |  |  |
| 42 | Willow Creek | X |  |  |  | 48 | No Data | No Data | No Data | $x$ |  |
| ${ }^{1}$ Includes harvest data collected during ADF\&G household harvest surveys. Harvest data generally include subsistence baseline indicators related to harvest amounts, harvest effort, harvest success, harvest participation, harvest sharing, and harvest diversity. Additional subsistence baseline indicators not generally available through ADF\&G harvest data include subsistence use areas, seasonal round, transportation methods, trip duration, trip frequency, and traditional knowledge including harvester observations of resource change. This document does not review the availability of additional subsistence baseline indicators for the potential study communities. |  |  |  |  |  |  |  |  |  |  |  |



## ATTACHMENT 14-2 HOUSEHOLD HARVEST SURVEY INSTRUMENT (DRAFT)

## COMPREHENSIVE SUBSISTENCE SURVEY

SUSITNA, ALASKA

January to December, 2012

This survey is used to estimate subsistence harvests and to describe community subsistence economies. We will publish a summary report, and send it to all households in your community. We share the community information with the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service and the National Park Service. We work with the Federal Regional Advisory Councils and with local Fish and Game Advisory Committees to better manage subsistence, and to implement federal and state subsistence priorities.
We will NOT identify your household. We will NOT use this information for enforcement. Participation in this survey is voluntary. Even if you agree to be surveyed, you may stop at any time.


## COOPERATING ORGANIZATIONS

Between JANUARY and DECEMBER, 2012.
...who lived in your household?


Between JANUARY and DECEMBER, 2012... ...did this person.

$\qquad$

Between JANUARY and DECEMBER, 2012.
...Did members of your household participate in commercial salmon fishing? $\qquad$ Y N $\square$

IF NO, go to the next harvest page.
If YES, continue on this page...

Please estimate the number of salmon ALL MEMBERS OF YOUR HOUSEHOLD REMOVED FROM COMMERCIAL HARVEST FOR PERSONAL USE OR SHARING in 2012. INCLUDE the fish you gave away, ate fresh, fed to dogs, lost to spoilage, caught as incidental catch while fishing for another species, or got by helping others. If harvested with others, report ONLY YOUR SHARE of the catch.


Do members of your household USUALLY participate in COMMERCIAL NON-SALMON FISHING ?.................................... Y N

Between JANUARY and DECEMBER, 2012...
...Did members of your household participate in commercial non-salmon fishing? $\qquad$

IF NO, go to the next harvest page.
If YES, continue on this page..

Please estimate the number of commercially harvested non-salmon fish ALL MEMBERS OF YOUR HOUSEHOLD REMOVED FROM COMMERCIAL HARVEST FOR PERSONAL USE OR SHARING in 2012. INCLUDE the fish you gave away, ate fresh, fed to dogs, lost to spoilage, caught as incidental catch while fishing for another species, or got by helping others. If harvested with others, report ONLY YOUR SHARE of the catch.


Do members of your household USUALLY participate in COMMERCIAL MARINE INVERTEBRATE HARVEST ? $\qquad$
$\square$

Between JANUARY and DECEMBER, 2012...
...Did members of your household participate in commercial marine invertebrate harvest?. $\qquad$

IF NO, go to the next harvest page.
If YES, continue on this page...

Please estimate the commercially harvested marine invertebrates ALL MEMBERS OF YOUR HOUSEHOLD REMOVED FROM COMMERCIAL HARVEST in 2012. INCLUDE the marine invertebrates you gave away, ate fresh, fed to dogs, lost to spoilage, caught as incidental catch while fishing for another species, or got by helping others. If harvested with others, report ONLY YOUR SHARE of the catch.


Do members of your household USUALLY harvest SALMON ?
?......

Between JANUARY and DECEMBER, 2012.
...Did members of your household USE or TRY TO HARVEST salmon?. $\qquad$
$\square$

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...
 lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch. Do not include fish caught and released.


## ASSESSMENTS: SALMON

Between JANUARY and DECEMBER, 2012...


Do members of your household USUALLY harvest OTHER FISH ?
Y N

Between JANUARY and DECEMBER, 2012
..Did members of your household USE or TRY TO HARVEST other tish?. $\qquad$ $Y \quad N$ $\square$

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...

Please estimate how many other fish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012, including with a rod and reel. INCLUDE other fish you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. It tishing with others, report ONLY YOUR SHARE of the catch. Do not include fish caught and released

|  | IN 2012 <br> DID MEMBERS OF YOUR HH... |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ~ّ | (1) | $\begin{aligned} & \stackrel{\sim}{\omega} \\ & \underset{\sim}{\sim} \\ & \underset{\sim}{\underset{y}{x}} \\ & \hline \end{aligned}$ |  | $\underset{\substack{\sim}}{\substack{2}}$ |
|  | (circle) |  |  |  |  |
| RAINBOW TROUT | Y N | Y N | $Y \mathrm{~N}$ | Y N | Y N |
| . . 126204000 . . . . . |  |  |  |  |  |
| LAKE TROUT | Y N | Y N | Y N | Y N | Y N |
| $\cdots$. 125010000 ................................ |  |  |  |  |  |
| CUTTHROAT TROUT | Y N | Y N | Y N | Y N | Y N |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| $\cdots \cdots, \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |  |  |  |
| DOLLY VARDEN |  |  |  |  |  |
|  |  |  |  |  |  |
| GRAYLING | Y N | Y N | Y N | Y N | Y N |
|  |  |  |  |  |  |
| PIKE $Y$ Y Y |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| ROUND WHITEFISH | Y N | Y N | Y N | Y N | Y N |
|  |  |  |  |  |  |
| HUMPBACK WHITEFISH | Y N | Y N | Y N | Y N | Y N |
|  |  |  |  |  |  |
| BROAD WHITEFISH | Y N | Y N | Y N | Y N | Y N |
|  |  |  |  |  |  |
| LEAST CISCO $Y$ Y N Y N Y N Y N Y |  |  |  |  |  |
|  |  |  |  |  |  |
| UNKNOWN WHITEFISH |  |  |  |  |  |
|  |  |  |  |  |  |
| SUCKER $Y$ Y Y N Y |  |  |  |  |  |
| $\cdots, \cdots, 126000000, \%$, | $\cdots \cdot \cdot$ | $\cdots \cdot$ | $\cdots$, | $\cdots \cdots \cdot$ | $\because \cdot$ |



Continue on next page

[^0]
## ..continued

Please estimate how many other fish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012 , including with a rod and reel. INCLUDE other fish you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch. Do not include fish caught and released.


[^1]Do members of your household USUALLY harvest MARINE INVERTEBRATES/SHELLFISH? $\qquad$

Between JANUARY and DECEMBER, 2012..
...Did members of your household USE or TRY TO HARVEST marine invertebrates/shellfish ?... $\qquad$ N $\because, \because$ IF NO to both questions, go to the next harvest page.
If YES, continue on this page...
Please estimate how many marine invertebrates/shellfish ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012. INCLUDE marine invertebrates/shellfish you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If fishing with others, report ONLY YOUR SHARE of the catch.


## MARINE INVERTEBRATES/SHELLFISH

Between JANUARY and DECEMBER, 2012...
To conclude our marine invertebrates/shellfish section, I am going to ask a few general questions about marine invertebrates/shellfish. Last year...


Do members of your household USUALLY hunt for LARGE LAND MAMMALS?.. $\qquad$

Between JANUARY and DECEMBER, 2012...
...Did members of your household USE or TRY TO HARVEST large land mammals?..............................................................................................................Y N $\square$

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...
Please estimate how many large land mammals ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012. INCLUDE large land mammals you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.


Between JANUARY and DECEMBER, 2012...

To conclude our large land mammals section, I am going to ask a few general questions about large land mammals.
Last year...
...did your household use LESS, SAME, or MORE large land mammals than in recent years?. If LESS or MORE...

X L S M WHY was your use different?


Last year...
...did your household GET ENOUGH large land mammals?. $\qquad$
If NO..
What KIND of large land mammals did you need? $\qquad$
$\qquad$

How would you describe the impact to your household of not getting enough large land mammals last year?.
minor? ...major? severe?
(1)
(2)
(3)

Between JANUARY and DECEMBER， 2012.
．．．Did members of your household USE or TRY TO HARVEST small land mammals or furbearers？．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．

IF NO to both questions，go to the next harvest page．
If YES，continue on this page．．．

Please estimate how many small land mammals or furbearers ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012．INCLUDE small land mammals or furbearers you gave away，ate fresh，fed to dogs，lost to spoilage，or got by helping others．If hunting or trapping with others，report ONLY YOUR SHARE of the catch．

|  | IN 2012 <br> DID MEMBERS OF YOUR HH．．． |  |  |  |  | IN 2012，HOW MANY $\qquad$ DID MEMBERS OF YOUR HOUSEHOLD HARVEST？ |  |  |  |  |  |  |  |  |  |  |  |  | UNITS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & \stackrel{\sim}{5} \\ & \stackrel{y}{\sim} \\ & \underset{\sim}{x} \\ & \\ & \hline \end{aligned}$ |  | $$ | $\begin{aligned} & \underset{\sim}{\underset{y}{c}} \\ & \underset{y}{\lambda} \\ & \underset{i}{c} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { I } \\ & \text { N } \\ & \mathbb{y} \\ & \sum \end{aligned}$ | $\begin{aligned} & \frac{1}{\mathrm{r}} \\ & \frac{1}{c} \end{aligned}$ | $\underset{\Sigma}{\grave{\Sigma}}$ | $\stackrel{\text { 山 }}{2}$ | $\underset{~}{~}$ | $\begin{aligned} & 5 \\ & 0 \\ & 0 \\ & 2 \\ & \hline \end{aligned}$ |  | $\begin{array}{\|c} \stackrel{r}{心} \\ \text { O} \\ \vdots \\ \hline 0 \\ \hline \end{array}$ |  | $\begin{aligned} & \stackrel{\sim}{山 己} \\ & \sum_{\dot{\sim}}^{\sim} \\ & \underset{\sim}{u} \end{aligned}$ |  |  |
|  | （circle） |  |  |  |  | （enter number by month of take） |  |  |  |  |  |  |  |  |  |  |  |  | （ind） |
| BEAVER | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $220200000$ |  |  |  |  | ， |  |  |  |  |  |  |  |  |  |  |  |  |  | $\because$ |
| PORCUPINE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $\because \because 22600000 . \because$ | $\because \cdot$ | $\because \cdot$ | $\because \because$ | $\because \because$ | $\because \because$ | $\therefore$. | $\cdots$ | ， | ， | $\cdot$ | $\cdots \cdot$ | $\because \cdot$ | $\because \cdot$ | $\because \cdot$ | $\because \cdot$ | $\cdots \cdot$ | $\cdots \cdot$ | － | $\because \cdot \cdot$ |
| SNOWSHOE HARE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $\because 221004000 \cdot \square$ | $\cdots$ | $\therefore \therefore$ | $\because \cdot$ |  | $\therefore \therefore$ | $\because$ | ． | ． | ． | ． | $\because$ | $\therefore$ | － | ． | $\therefore$ ． | $\cdots$ | $\cdots$ | $\therefore$ | $\therefore \cdot{ }^{\prime}$ |
| RED FOX | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $220804000$ | $\because$ | $\because \because$ | $\because \because$ | $\because \because$ | $\because \cdots$ | $\therefore$ |  |  |  |  |  |  | $\because$ | ． | $\because \cdot$ | $\because$ | $\because \cdot$ | － | $\because \cdot$ |
| CROSS FOX | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $\cdots$, | $\cdots$ | $\because \cdot$ | $\because \because$ | $\therefore \because$ | $\because \because$ | $\therefore$ ， | $\cdot$ | ． | ， | ． | $\because \cdot$ | ． | $\cdots$ | $\because \cdot$ | $\cdots \cdot$ | $\because \cdot$ | $\because \cdot$ | $\because \cdot$ | $\because \because \cdot$ |
| WOLF | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
|  | ＇． | $\because \prime$ | $\therefore \therefore$ | $\therefore \therefore$ | $\therefore$ ． | ＇． | － | ． | ． | ． | $\because$ | ． | $\therefore$ | ． | $\therefore$ ． | $\cdots$ | $\therefore$ |  | $\therefore \therefore$ |
| WOLVERINE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $\cdots, 223400000$ ， |  | $\cdots, \cdots$ | $\because \because$, | $\cdots \cdots$ | $\because \because$ | $\therefore$ |  | ， |  |  | $\because \cdot$ |  | $\because \cdot$ | $\because \cdot$ | $\cdots$ | $\because \cdot$ | $\cdots$ | $\because \cdot$ | $\cdots \cdots$ |
| LAND OTTER | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| －．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |  |  |  | $\cdots \cdot$ |  |  |  |  |  | $\cdots \cdot$ | $\cdots$ | $\cdots$ | $\cdot$ | $\cdots \cdot$ | $\cdot \cdot$ | $\because \cdot$ | $\because$ | $\because \cdot \cdot$ |
| MUSKRAT | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| \％． 222400000 |  |  | $\therefore \because$ | $\because \prime$ | $\because \prime$ | ＇．＇ | ． |  |  |  |  |  |  |  |  |  |  |  | $\because$ |
| WEASEL | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $\because 223000000$ | $\because \cdot$ | $\therefore \cdots$ | $\because \because$ | $\because \cdot$ | $\because \cdot$ |  |  |  |  |  | $\because$ | $\cdots$ | $\cdots$ | $\because \cdot$ | $\because \cdot$ | $\because \cdot$ | $\because \cdot$ |  | $\cdots \cdot \cdot$ |
| LYNX | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
| $221600000$ |  |  | $\because \because$ |  | $\cdots '$ | ＇．＇ | $\bigcirc$ | ＇． | ． | $\therefore$ ． | ．. | ＇ | ．$\cdot$ | ． | ．. | ． | ． | ． | $\therefore \therefore \cdot$ |
|  | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |  |  |  |  |  | IND |
|  |  |  |  | $\because$ | $\because \because$ |  |  |  |  |  | $\because$ |  | $\because$ | $\because$ | $\because$ | $\because$ |  |  | $\because \because$ |

....continued

Please estimate how many small land mammals or furbearers ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012. INCLUDE small land mammals or furbearers you gave away, ate fresh, fed to dogs, lost to spoilage, or got by helping others. If hunting or trapping with others, report ONLY YOUR SHARE of the catch.


Between JANUARY and DECEMBER, 2012...
To conclude our small land mammals or furbearers section, I am going to ask a few general questions about small land mammals or furbearers. Last year...
...did your household use LESS, SAME, or MORE small land mammals or furbearers than in recent years?................................... X L S M

If LESS or MORE...
$X=$ do not use
WHY was your use different? $\qquad$
$\qquad$
$\qquad$

Last year...
...did your household GET ENOUGH small land mammals or furbearers?. $\qquad$ Y N If NO...

What KIND of small land mammals or furbearers did you need?. $\qquad$
$\qquad$
How would you describe the impact to your household of not getting enough small land mammals or furbearers last year?. $\qquad$
..minor? ...major? severe?
(1)
(2)
(3)

Do members of your household USUALLY hunt for MIGRATORY WATERFOWL?. $\qquad$

Between JANUARY and DECEMBER, 2012...
...Did members of your household USE or TRY TO HARVEST migratory waterfowl?. $\qquad$ Y N

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...

Please estimate how many migratory waterfowl ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012. INCLUDE migratory waterfowl you gave away, ate fresh, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.

|  | IN 2012 <br> DID MEMBERS OF YOUR HH... |  |  |  |  | IN 2012, HOW MANY $\qquad$ DID MEMBERS OF YOUR HOUSEHOLD ? |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Spring |  |  | Summer |  | Fall |  |  |
|  |  |  |  |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{o}} \\ & \stackrel{y}{\alpha} \end{aligned}$ | $\stackrel{\rightharpoonup}{\grave{~}}$ |  | $\succsim$ | 5 $\stackrel{5}{3}$ $\stackrel{3}{4}$ |  | $\begin{aligned} & \text { 岀 } \\ & \text { O} \\ & \text { O} \end{aligned}$ |  |
|  | (circle) |  |  |  |  |  |  |  |  |  |  |  |  |
| CANADA GEESE (CACKLERS) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410404040 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CANADA GEESE (BIG LESSER) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410404080 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CANADA GEESE (UNKNOWN) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410404000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WHITE-FRONTED GEESE Specklebelly | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410410000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SPECTACLED EIDER | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410206060 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BRANT (SEA GEESE) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410402000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EMPEROR GEESE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410406000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SNOW GEESE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410408000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GEESE (UNKNOWN) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410400000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TUNDRA SWAN (WHISTLING) | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410604000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SANDHILL CRANE | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410802000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MALLARD | Y N | Y N | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410214000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NORTHERN PINTAIL | Y N |  | Y N | Y N | Y N |  |  |  |  |  |  |  |  |
| 410220000 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Continue on next page.

HARVESTS: MIGRATORY WATERFOWL


## MIGRATORY WATERFOWL

Between JANUARY and DECEMBER, 2012...

To conclude our migratory waterfowl section, I am going to ask a few general questions about migratory waterfowl.
Last year...
...did your household use LESS, SAME, or MORE migratory waterfowl than in recent years?............................. X L M
If LESS or MORE...
WHY was your use different? $\qquad$

Last year...
...did your household GET ENOUGH migratory waterfowl?
Y N
If NO...
What KIND of migratory waterfowl did you need? $\qquad$
How would you describe the impact to your household
of not getting enough migratory waterfowl last year?. $\qquad$ ...minor?
..major? severe?
(2)
(3)

?......

Between JANUARY and DECEMBER, 2012...
...Did members of your household USE or TRY TO HARVEST other birds?. $\qquad$ .Y N

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...

Please estimate how many other birds ALL MEMBERS OF YOUR HOUSEHOLD HARVESTED in 2012. INCLUDE other birds you gave away, ate fresh, lost to spoilage, or got by helping others. If hunting with others, report ONLY YOUR SHARE of the catch.


| IN 2012, HOW MANY $\qquad$ DID <br> MEMBERS OF YOUR HOUSEHOLD HARVEST? |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Winter |  |  | Spring |  | Summer |  | Fall |  | Winter |  | $\sum$$\sum$$\sum$$\sum$$\sum$$\vdots$ |
|  | $\begin{aligned} & \underset{\sim}{\underset{\sim}{c}} \\ & \underset{\sim}{\underset{\sim}{\sim}} \\ & \underset{\sim}{\Psi} \end{aligned}$ | I U ※ $\Sigma$ $\Sigma$ | $\begin{aligned} & \overline{a_{a}^{\prime}} \\ & \frac{a}{2} \end{aligned}$ | $\underset{y}{\sum}$ | $\succsim$ | $\begin{aligned} & 5 \\ & \stackrel{5}{0} \\ & 0 \\ & 2 \end{aligned}$ | $\stackrel{\sim}{山}$ $\stackrel{\infty}{\infty}$ $\stackrel{\sim}{\rightleftarrows}$ $\stackrel{\sim}{u}$ $\sim$ | $\begin{aligned} & \text { ru } \\ & \text { O } \\ & \text { ○ } \\ & \hline 0 \end{aligned}$ |  |  |  |
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## OTHER BIRDS

Between JANUARY and DECEMBER, 2012...
To conclude our other birds section, I am going to ask a few general questions about other birds.
Last year...
...did your household use LESS, SAME, or MORE other birds than in recent years?
If LESS or MORE...
$X=$ do not use
WHY was your use different?. $\qquad$
$\qquad$
Last year...
...did your household GET ENOUGH other birds?.. $\qquad$ If NO...

What KIND of other birds did you need?. $\qquad$
How would you describe the impact to your household of not getting enough other birds last year? $\qquad$
..minor?
...major?
severe?
(1)
(2)
(3)
$\qquad$

Between JANUARY and DECEMBER, 2012.
...Did members of your household USE or TRY TO GATHER bird eggs?
N

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...

Please estimate how many bird eggs ALL MEMBERS OF YOUR HOUSEHOLD GATHERED in 2012. INCLUDE bird eggs you gave away, ate fresh, lost to spoilage, or got by helping others. If looking with others, report ONLY YOUR SHARE of the eggs.


## EGGS <br> Between JANUARY and DECEMBER, 2012...

To conclude our eggs section, I am going to ask a few general questions about resource name.
Last year...
...did your household use LESS, SAME, or MORE eggs than in recent years?.
$\qquad$
$\qquad$
Last year...
...did your household GET ENOUGH eggs? If NO...

What KIND of eggs did you need?. $\qquad$
How would you describe the impact to your household of not getting enough eggs last year?. $\qquad$
.minor?
...major?
severe?
$\square$
Do members of your household USUALLY harvest PLANTS AND BERRIES INCLUDING WOOD?.

Between JANUARY and DECEMBER, 2012...
...Did members of your household USE or TRY TO HARVEST plants and berries including wood? Y N $\square$

IF NO to both questions, go to the next harvest page.
If YES, continue on this page...
Please estimate how many plants and berries including wood ALL MEMBERS OF YOUR HOUSEHOLD HARVESTING in 2012. INCLUDE plants and berries including wood you gave away, ate fresh, lost to spoilage, or got by helping others. If harvesting with others, report ONLY YOUR SHARE of the harvest.


## LANTS AND BERRIES

Between JANUARY and DECEMBER, 2012..
To conclude our plants and berries section, I am going to ask a few general questions about plants and berries. Last year.


What KIND of plants and berries did you need? $\qquad$
$\qquad$
minor? ...major? severe? of not getting enough plants and berries last year?.
(1)
(2)
(3)


## HEALTH IMPACT ASSESSMENTS

| (circle ONE response) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| In a normal week, how many times a day on average are wild foods such as salmon, non-salmon fish, moose, caribou, birds, etc. served in your household? $\qquad$ | NONE Don't use <br> (0) | LESS than once a day <br> (1) | About <br> ONCE <br> a day <br> (2) | 2 OR 3 times a day <br> (3) | 3 OR MORE <br> times <br> a day <br> (4) |

If this household does NOT USEwild foods, go to the next page.
Otherwise, continue below...

Please list the TOP FIVE WILD FOODS members of your household eat on a regular basis. Include wild foods that may not be available now, but are important at other times of the year. Please list most important foods first.
(Not necessary to fill out every line)

|  | Subsistence Food 1 | Subsistence Food 2 | Subsistence Food 3 | Subsistence Food 4 | Subsistence Food 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOP FIIEE <br> SUBIITENCE FOODS |  |  |  |  |  |

If your household CANNOT GET WILD FOODS, what do members of your household eat instead? Include alternate foods that may not be available now, but are important at other times of the year. Please list most important alternative foods first.
(Not necessary to fill out every line)


Between JANUARY and DECEMBER, 2012.
...Did any members of your household earn money from a JOB or from SELF EMPLOYMENT?

For each member of this household born before 1997, please list EACH JOB held between JANUARY and DECEMBER, 2012
For household members who did not have a job, write: "RETIRED," "UNEMPLOYED," "STUDENT," "HOMEMAKER," etc.
There should be at least ONE ROW for each member of this household born BEFORE 1997.


Between JANUARY and DECEMBER, 2012
...Did any members of your household receive a dividend from the Permanent Fund or a Native Corporation?............................................. Y N



Between JANUARY and DECEMBER, 2012...
...Did any members of your household receive OTHER income such as SENIOR BENEFITS or UNEMPLOYMENT?. $\qquad$
$\square$

IF NO, go to the next page.


DO YOU HAVE ANY QUESTIONS, COMMENTS, OR CONCERNS?

$\qquad$
$\qquad$
$\qquad$
$\qquad$

INTERVIEW SUMMARY:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## ATTACHMENT 14-3

 HOUSEHOLD HARVEST SURVEY KEY INFORMANT INTERVIEW PROTOCOL (DRAFT)
# Household Harvest Survey Key Informant Interview Protocol (Draft) 

## Susitna Basin 2013

Name of community:
Date:
Name of interviewer:
Name of respondent:
Age of respondent:
How long have you lived in this community?
Would you like to have your name included in the report? Yes No Notes:

## Project Overview

We are currently conducting a survey in your community to document the harvest and use of wild resources for the calendar year 2013. We understand that one year doesn't represent the long-term pattern of resource use. As part of this survey we ask questions about how the harvest and use of wild resources is different than in recent years, say the past five years. In addition, this interview is intended to help us better understand long-term trends in harvest patterns over time, possibly over your lifetime. We appreciate you sharing this information with us as it will give us a much better understanding of the changes that have occurred in your area over time.
Note to interviewer. You do not have to ask all of these questions. You can simply ask the main questions and then use this protocol as a guide to understand the types of questions we are interested in.

WhERE, HOW, AND FROM WHOM, DID YOU LEARN YOUR SUBSISTENCE WAY OF LIFE?

FISH (SALMON/Non-SALMON) - What kinds of fish are important to your household and community? How has this changed over your lifetime?

- Difference between salmon and non-salmon fish for your community?
- Have your harvest locations for fish changed over time?
- Has harvest timing changed?
- What kind of gear/transportation did you use in the past? What about now?
- Have environmental changes affected harvest patterns over your lifetime?

Large Land Mammals - What large animals are most important to your household and community? Has what you harvest and how you harvest changed over your lifetime?

- Has harvest timing changed? If so why?
- How have you changed the areas where you harvest over your lifetime, and why do you think this has occurred?
- What kind of transportation did you use in the past and how has this changed over time?

Small Land Mammals/Furbearers - What small game and furbearers are most important to your household and community? How has your harvesting effort changed over your lifetime?

- What small game do you harvest to eat and which game do you harvest for fur?
- Has harvest timing changed? What about harvest locations?
- Do you harvest small game opportunistically or do you target small game?
- What kind of gear/transportation did you use in the past? What about now?

Birds and Eggs - What birds are most important to your household and community? How has your harvesting effort changed over your lifetime?

- Are eggs important to your household or community?
- Has harvest timing changed?
- Are the places you go to find birds and eggs different now than in the past?

Plants/BERRIES/Wood - What plants and berries are most important to your household and community? Has what you harvest and how you harvest changed over your lifetime?

- Has harvest timing changed?
- Do you use more or less wood for heat than in the past? Is it more or less difficult to find wood?
- Are the places you go to find plants, berries, or wood different now than in the past?
- What kind of transportation did you use in the past? What about now?
- How has environmental change affected the areas you use to harvest berries? What about the abundance of berries?


## RESOURCES PARTICULAR TO YOUR COMMUNITY

- Are there resources that you feel are unique to your community, or hold a special value to your community?
- Are there particular times of year that you harvest these resources? What about sharing these resources within your community and with other communities?


## Final Comments

What do you feel has been the biggest change in your subsistence way of life, from the time you can remember until now?

Do you recall a time before regulations were enforced? How have your harvest practices and patterns changed since that time?
Is there anything else you would like to share?

## ATTACHMENT 14-4

## ACTIVE HARVESTER SUBSISTENCE MAPPING INTERVIEW

 PROTOCOL (DRAFT)
## Active Harvester Subsistence Mapping Interview Protocol (Draft)

## Susitna-Watana Hydroelectric Project <br> Alaska Energy Authority 2013

| Community: | Date of Interview: | Interviewers: |
| :---: | :---: | :---: |
| Start Time: | End Time: |  |

Section A: Respondent Information
For each individual completing the interview:

| Respondent | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- |
| Respondent ID |  |  |  |  |
| Birth year |  |  |  |  |
| Birth Residence |  |  |  |  |
| Residence history |  |  |  | $\square$ |
| Active Harvester? | $\square$ | $\square$ | $\square$ | $\square$ |

## Section B: Community Trails and Travel Routes

| Travel Routes <br> (including routes <br> to other villages) | Record the following information for Last 10 Year Travel Routes ( $\sqrt{ }$ box to indicate <br> complete) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Location | Line | Line | Line | Line | Line |
| Travel Method |  |  |  |  |  |

## Section C: Last 10 Year Subsistence Mapping and Resource Change

Document last 10 year subsistence use areas for each of the following resource categories:


Document last 10 year observed changes for the following resource categories and change types:

|  | Caribou | Moose | Other <br> Large <br> Land <br> Mammals | Furbearers <br> \& SLM | Waterfowl | Upland <br> Birds | Eggs | Salmon | Non- <br> Salmon <br> Fish |  <br> Plants |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Use |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |

## Section D: Last Year Subsistence Activities

Between January 1, 2012 and December 31, 2012, did you try to harvest... [Check the appropriate boxes for each resource]

| Caribou | Moose | Bear <br> Sheep | Furbearers <br> \& SLM | Marine <br> Mammals | Waterfowl | Upland <br> Birds | Eggs | Salmon | Non- <br> Salmon <br> Fish | Marine <br> Inverts. |  <br> Plants |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |

[Starting in January, record each of the subsistence activities the harvester engaged in between January 1, 2012 and December 31, 2012, by month. Document the following information for each activity identified. Use additional forms as needed.]

|  | Harvest Activity |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |  |  |
| Subsistence Resources <br> Targeted [List and circle <br> TARGET resource] |  |  |  |  |  |  |  |

## Section E: Issues and Concerns

## Issues and Concerns

- Do you have any issues and concerns regarding your subsistence lifestyle and/or your community? (e.g., sport hunting and fishing, climate change, development)
- Do you have any issues and concerns regarding cultural resources?
- Are there comments you would like to express about the proposed project?
- Suggestions or overall message for the project?


## Other

- Are there other active harvesters in the community that we should interview?

ATTACHMENT 14-5
TRADITIONAL KNOWLEDGE WORKSHOP PROTOCOL (DRAFT)

# Traditional Knowledge Workshop Protocol (Draft) Susitna-Watana Hydroelectric Project 

## Physical Environment

1. Terrestrial Environment (e.g., soils, permafrost, erosion)
a. Is there anything the Susitna-Watana Hydroelectric Project should know about soils or land in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
2. Watershed (e.g., rivers, lakes, and wetlands [e.g., swampy areas])
a. Is there anything the Susitna-Watana Hydroelectric Project should know about rivers, lakes, and wetlands (swampy areas) in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
3. Storms, Winds, and Climate
a. Is there anything the Susitna-Watana Hydroelectric Project should know about storms, winds, or climate in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
4. Ice and Snow
a. Is there anything the Susitna-Watana Hydroelectric Project should know about ice and snow in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
5. Air Quality
a. Is there anything the Susitna-Watana Hydroelectric Project should know about air quality in the Project area?
i. Specific places
b. Additional questions to be provided by relevant resource authors
6. Earthquakes and Volcanoes
a. Is there anything the Susitna-Watana Hydroelectric Project should know about earthquakes and volcanoes in the Project area?
i. Specific places
b. Additional questions to be provided by relevant resource authors

## Biological Environment

1. Vegetation
a. Is there anything the Susitna-Watana Hydroelectric Project should know about plants and trees in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
2. Wildlife
a. Is there anything the Susitna-Watana Hydroelectric Project should know about animals in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors
3. Fish
a. Is there anything the Susitna-Watana Hydroelectric Project should know about fish in the Project area?
i. Specific Places?
b. Additional questions to be provided by relevant resource authors

## Social Environment

1. Cultural Resources
a. Is there anything the Susitna-Watana Hydroelectric Project should know about culturally important places in the Project area?
i. E.g., camps, cabins, and caches; old village sites; burials; place names; traditional use areas; traditional and contemporary trails and travel routes; important traditional lookouts; any other areas of importance?
b. Additional questions to be provided by relevant resource authors
2. Subsistence
a. Is there anything the Susitna-Watana Hydroelectric Project should know about subsistence hunting, fishing, and gathering (e.g., berries, plants, firewood) activities in the Project area?
i. Specific places?
ii. For what resources?
b. Are there important areas for hunting or gathering or other cultural activities that you feel need to be protected or considered by the Project?
c. In general, when do you most actively use the Project area for subsistence harvesting activities?
d. Approximately what proportion of your community's subsistence harvest comes from the Project area?
e. Additional relevant questions may be provided by resource authors
3. Noise and Visual
a. Is there anything the Susitna-Watana Hydroelectric Project should know about noise and visual effects?
i. Specific places?
b. Additional questions to be provided by relevant resource authors
4. Socioeconomics
a. Is there anything the Susitna-Watana Hydroelectric Project should know about social and economic issues or topics?
b. Additional questions to be provided by relevant resource authors
5. Health
a. Is there anything the Susitna-Watana Hydroelectric Project should know about health issues or topics?
b. Additional questions to be provided by relevant resource authors

## Additional Comments

1. Do you have any comments regarding potential benefits or impactsof the Susitna-Watana Hydroelectric Project? If so, what are your comments?
a. E.g., Land, Water, Air, Weather, Plants/Trees, Animals, Culturally Important Places, Subsistence, Noise/Views, Social and Economic
b. Additional questions to be developed through dialogue with AEA and review of scoping comments

[^0]:    These columns should include all the harvests: other fish HARVESTED by members of this household in 2012.

[^1]:    OTHER FISH
    Between JANUARY and DECEMBER, 2012...
    To conclude our other fish section, I am going to ask a few general questions about other fish.
    Last year...
    ...did your household use LESS, SAME, or MORE other fish than in recent years?.
    

    Y N
    Last year...
    ...did your household GET ENOUGH other fish? $\qquad$ If LESS or MORE..

    WHY was your use different?.. $\qquad$ If NO...

    What KIND of other fish did you need? $\qquad$
    How would you describe the impact to your household of not getting enough other fish last year?. $\qquad$

