

# **MARKET VALUE APPRAISAL**

of PARCELS within The COSNA RIVER

**REMOTE RECREATIONAL CABIN STAKING AREA**



**YEAR 2005**

**BASE APPRAISAL REPORT No. 3214**

## **STATE of ALASKA**

Department of Natural Resources  
Division of Mining Land & Water  
550 West Seventh Avenue Suite 650  
Anchorage AK 99501-3576

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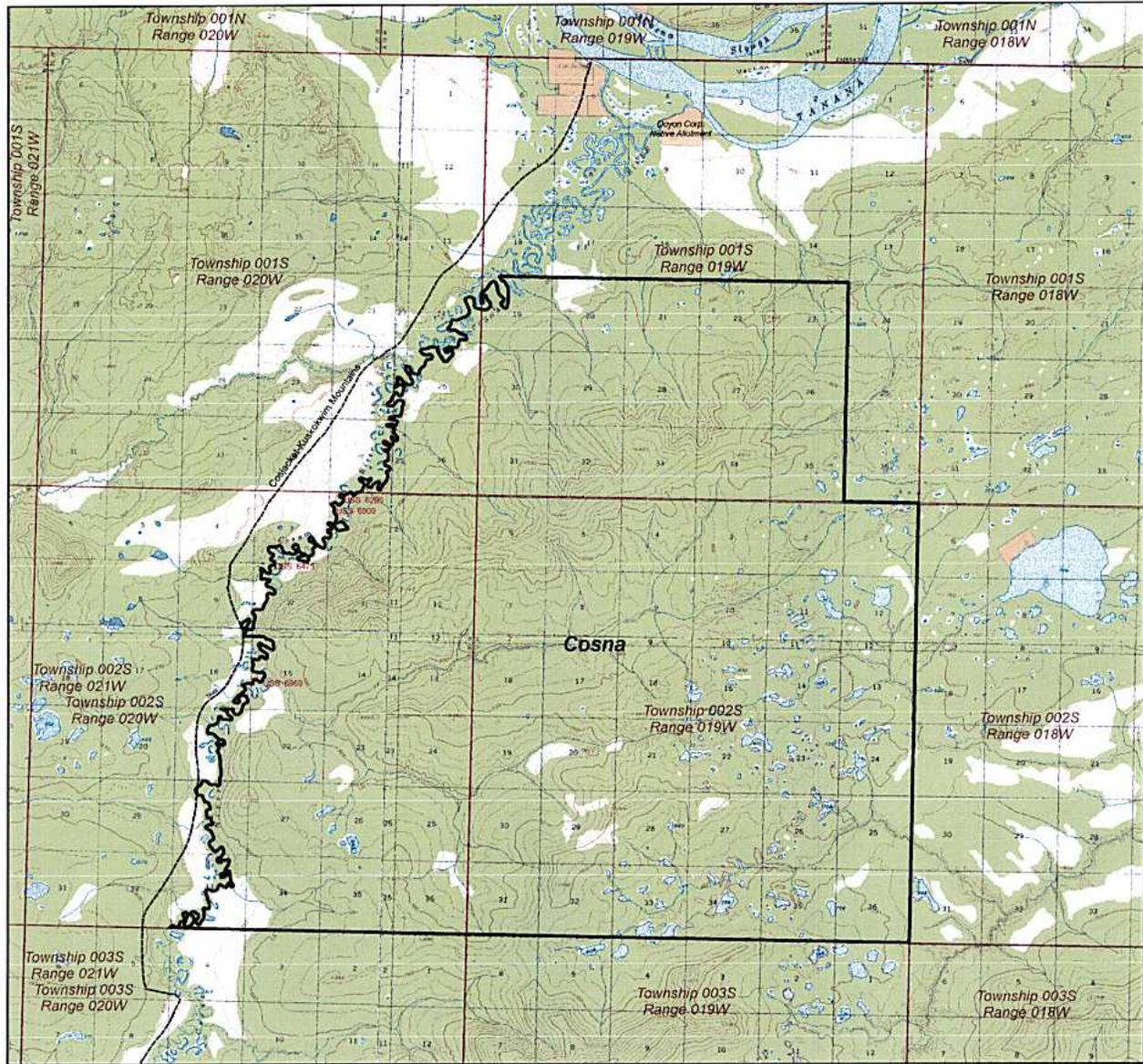
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# DRAFT

## Staking Map: Cosna

Remote Recreational Cabin Sites Staking Area No. 1105103



CO 1/2405 cosna.mxd

USGS QUADS 1:63,360  
Kantishna River C-3, C-4, D-3, D-4  
T 1 S R 19 W, T 1 S R 20 W, T 2 S R 19 W, T 2 S R 20 W,  
Fairbanks Meridian

This staking map is for general representation only. It is intended to be used as a guide only and may not show the exact location of existing parcels or other features. Survey documents take the official record and should be followed in staking.

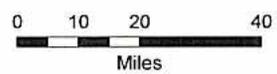
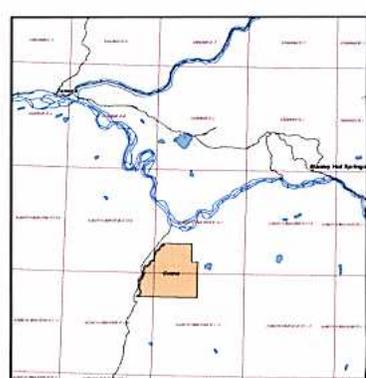
Notes:  
Minimum parcel size: 20 acres  
Minimum parcel size: 5 acres

Staking schedule: August 2005 to January 2006

1. All parcels shown on and owned by the State of Alaska that contain land within 10 feet of a surveyed or published unimproved section line are subject to a 5-foot wide easement on each side of the section line, which is reserved to the State of Alaska for public highway under AS 25.15.010. This easement may be obtained over a surveyed section line.
2. Parcels may not be placed across any public or navigable water body. Parcels are subject to a 50-foot public access easement along the ordinary high water mark.
3. Parcels are subject to a 50-foot building setback from the ordinary high water mark of all water bodies. State water bodies may also have staking setbacks or other usage restrictions.
4. A staking setback is required from unimproved riparian areas.
5. Other surveys (i.e. ALE, USGS) have survey monuments at each corner, which can be used as reference points and corner corners when staking. See the survey plat for information on monument corner numbers, bearings, and distances. Monumental trees in the field may also indicate area the graphic record.
6. There are public access easements along most ALE & boundaries. Check the survey plat for additional information.
7. All easements have not been verified and their actual location may differ on the ground. Labeling of a parcel easement does not guarantee the existence of a trail.
8. Unimproved sections are not surveyed by the Department of Natural Resources. Use of staking on these lands that are not surveyed is at your own risk.
9. Staking maps are prepared only to provide information for public reference in staking areas. Staking areas boundaries. They may or may not be boundaries at these coordinates.
10. See the general staking instructions and associated supplemental staking instructions for additional information.

**Legend**

- Staking Area
- Existing Parcel or Excluded Area
- RS 2477 and Other Trails



## Area Summary

The Cosna River is located in the Northern region, about 100 miles southwest of Fairbanks, Alaska. It is located on the east side of the Cosna River, three miles upstream from the confluence of the Cosna and Tanana Rivers. The area is 35 miles west from the community of Manley and 35 miles east of the village of Tanana. The staking area encompasses approximately 45,000 acres. There are 50 new staking authorizations proposed for this area, with sizes ranging from five to twenty acres.

PHYSICAL CHARACTERISTICS	
Location	This area is located adjacent to the eastern bank of the Cosna River approximately 3 air miles upstream from the confluence of the Cosna and Tanana Rivers. The confluence is 35 miles downstream from Manley and 40 miles upstream from Tanana. Manley can be reached via the Elliot Highway 160 road miles north of Fairbanks. Tanana is at the confluence of the Tanana and Yukon Rivers and can be reached by air.
Topography map	USGS Quads Kantishna River (XKR) C3 and C4
Cadastral Survey	ASCS F001S020W101, ASCS F002S020W101
Topography/Terrain/Major Features	The area is located within the Cosna River drainage. The banks of the river rise 5 to 15 feet above the water level through the disposal area. The river is at an elevation of 250 feet. Two ridges run parallel through the staking area from northeast to southwest. The eastern half of the disposal area is on a plateau with varied elevation. Small pothole lakes dot the plateau.
Access	Access to the general vicinity is limited to river systems, primarily via the Tanana River from Tanana or Manley to the mouth of the Cosna River. The staking area can be accessed from the Cosna River. Overland access from the Cosna River to the staking area from the Cosna River is gained by the Mooseheart Mountain trail heading in a southeasterly direction or the Cosjacket – Kuskokwim Mountain trail, a recorded RS 2477 route. The RS 2477 route near the confluence of the Cosna and Tanana Rivers is through a native allotment. Do not use this portion of the trail. This access is practical only during winter months. The trail is on the opposite bank from the staking area. Access within the western portion of the staking area is via surveyed section lines.
Roads/Trails	The historic Cosjacket – Kuskokwim Mountains Trail (RST 460) runs south from near the confluence of the Cosna and Tanana Rivers along the left (west) bank of the Cosna River. Do not access the trail through native allotments on the Tanana River in Cosjacket. The trail is primarily used for winter travel. The Mooseheart Mountain Trail runs southeast from near the confluence toward Moosehead Lake. Within the western portion of the staking area several miles of section lines have been brushed out.
View	Views of the surrounding forest, hills, rivers, Mooseheart Mountain.
Climate	Typical of Interior Alaska, this area has a cold, continental climate. The average daily high temperature is in the upper 50's in summer, low temperatures during winter range from -6 to -21. Temperature extremes have been measured from -70 to 93. Average annual precipitation is 15 inches with snowfall of 59.3 inches.
Soils	The soils are well-drained on natural levees or along existing and former river channels. These soils consist of silt and fine sand covered with a thin layer of organic material. Permafrost is found in scattered locations at depths greater than 5 feet.
Vegetation	White spruce and large birches are predominant near the river. Alder and willow are found in the undergrowth. Vegetation at higher elevations is predominantly black spruce and shrubs.
Water Source	In addition to the Cosna River, several creeks run through the area. There are small pothole lakes in the southeastern portion of the staking area. Water quality is unknown.

<b>EASEMENTS AND RESERVATIONS</b>	
<b>Area Plan, Management Unit, Classification</b>	Tanana Basin Area Plan, Subregion 2, Lower Tanana: Management Unit 2B, Lower Tanana River Corridor, Subunit 2B3b, classified Settlement; also Subregion 3, Kantishna: Management Unit 3H, Lower Cosna River Corridor, Subunit 3H1, classified Settlement.
<b>Fire Management Option</b>	The staking area has a Limited management option. The Alaska Interagency Wildland Fire Management Plan is updated annually. Contact the Division of Forestry for updated information regarding management options. Stakers are urged to locate parcels in hardwood stands or near water bodies to reduce potential for fire.
<b>Game Management Unit</b>	The staking area is in Game Management Unit 20C.
<b>Allowed Uses</b>	Cabin site leases are for recreational use only. No commercial use or permanent residence is allowed while under lease. Once the cabin site is under purchase contract or conveyed into private ownership, these restrictions no longer apply.
<b>Municipal Authority</b>	The staking area is not within an organized borough. It is within the State of Alaska platting authority.
<b>Section Line Easements</b>	All parcels staked on lands owned by the State of Alaska that contain land within 50 feet of a surveyed or protracted (unsurveyed) section line, or that are bisected by such section line(s), are subject to a 50-foot wide easement on each side of the section line, which is reserved to the State of Alaska for public highways under AS 19.10.010.
<b>Public Access and Utility Easements</b>	All cabin sites are subject to a minimum 25-foot public access and utility easement along interior parcel boundary lines and a 60-foot public access easement along all existing unnamed trails. Stakers may not obstruct or block access within these easements.
<b>Water Body Easements, Staking Setbacks and Restrictions</b>	All parcels are subject to a 50-foot public access easement and a 100-foot building setback along the ordinary high water line of all water bodies. Stream crossings with motorized vehicles may be prohibited by applicable state and federal laws.
<b>Reserved Areas</b>	No staking is allowed within areas reserved or excluded on the staking maps for wood lots, airstrips, public use, or other uses.
<b>Water Supply, Sewage Disposal</b>	Wastewater treatment and disposal systems must meet the regulatory requirements of the Alaska Department of Environmental Conservation.
<b>Wetlands</b>	Cabin sites may contain wetlands and may require Army Corps of Engineers permits prior to placement of fill material.
<b>Improvements</b>	Prior to construction of any structure or waste disposal system, contact the municipal authority for any permits or for required setbacks from water bodies, lot lines, and easements.
<b>Comments</b>	Survey plats and survey plat notes should be reviewed for specific information on easements, building setbacks, or other restrictions. Check recorder's office for current ownership of private land. Traditional fishing, hunting, and resource harvest for personal use are some of the principle uses of state land within subunits 2B and 3H. Flooding and glaciation potential exist in stream valleys, and steep slopes may be unstable and subject to landslides.

### Appraisal Summary

Location	This area is located adjacent to the eastern bank of the Cosna River approximately 3 air miles upstream from the confluence of the Cosna and Tanana Rivers. The confluence is 35 miles downstream from Manley and 40 miles upstream from Tanana. Manley can be reached via the Elliot Highway 160 road miles north of Fairbanks. Tanana is at the confluence of the Tanana and Yukon Rivers and can be reached by air.
Topography map	USGS Quads Kantishna River (XKR) C3, C4, D-4 and D-4
Legal Description	The Cosna staking area encompasses approximately 46,000 acres within that a portion of section 19 lying east of the Cosna River, sections 20-23, and sections 25-36, Township 1 South, Range 19 West, Fairbanks Meridian; sections 24-26 and sections 35-36 lying east of the Cosna River, Township 1 South, Range 20 West, Fairbanks Meridian; sections 1-36, Township 2 South, Range 19 West, Fairbanks Meridian; and section 2, sections 9-10, sections 15-16, section 21, section 28, and section 33 lying east of the Cosna River and section 1, sections 11-14, sections 22-27, and sections 34-36, Township 2 South, Range 20 West, Fairbanks Meridian. Land located on the south bank of the Cosna River, within Section 15 is excluded as it contains a Native Allotment.
Cadastral Survey	ASCS F001S020W101 and F002S020W101
Owner	State of Alaska
Hypothetical Key Parcel "A"	Size: 10 acres Location: Cosna River Staking Area Access: Boat, Walk-in, snow machine, float/ski plane or ATV Lot Type: Parcel within 400' from (Big) Cosna River or landing site Building Site: at least 50% level, wooded and well drained. Setback: 100 foot building setback from high water mark of all waterbodies. Waterfront: Cosna River Easements: Typical section-line & pedestrian around lot. Amenities: Typical view of surrounding area.
Hypothetical Key Parcel "B"	Size: 10 acres Location: Cosna River Staking Area Access: Walk-in, snow machine or ATV Lot Type: More than ¼ mile from Cosna River or landing site Building Site: at least 50% level, wooded and well drained. Setback: None Waterfront: None Easements: Typical section-line & pedestrian around lot. Amenities: Typical view of surrounding area.
Improvements	None
Highest and Best Use	Recreational cabin sites
Interest Appraised	Fee simple title, excluding mineral rights
Date of Value	April 1, 2005
Date of Report	April 1 2005

\*1<sup>st</sup> tier parcel is defined as a parcel with direct frontage on a lake, river, or is separated from the water by public land.

\*2<sup>nd</sup> tier parcel is defined as a location where a parcel(s) could be staked between the subject and the nearest water-body access.

Conclusion of Values for Hypothetical Key Parcel "A"			
	Size	\$\$ per Acre	\$\$ per Site
Minimum Parcel Size	5.00	\$1,333*	\$ 6,700
<b>Key Parcel</b>	<b>10.00</b>	<b>\$1,000</b>	<b>\$10,000</b>
Maximum Parcel Size	20.00	\$750*	\$15,000

- \* Based on size adjustment chart located in the Addenda. **Key Parcel in Bold.**

<b>Conclusion of Values for Hypothetical Key Parcel "B"</b>			
	Size	\$\$ per Acre	\$\$ per Site (rd.)
Minimum Parcel Size	5.00	\$665*	\$3,300
<b>Key Parcel</b>	<b>10.00</b>	<b>\$500</b>	<b>\$5,000</b>
Maximum Parcel Size	20.00	\$375*	\$7,500

**Summary of Adjustments**

Date of Value	Date of filing	To Be Determined
Location	No distinction within the staking area	1.00
Size, acres	Adjustment for variations in size.	See Addenda
Access	Within 400' of Fly-in lake or (Big) Cosna River frontage with 100' building setback. North of F001S020W25-26 Between 400' and 900 feet of Cosna River, fly-in access Between 900' and 1,320 feet from water access If further than 0.25 mile from (Big) Cosna River	1.00 0.85 of Key "A" 0.75 of Key "A" 1.00 of Key "B"
Waterfront	Frontage on (Small) Cosna River with 100' building setback. South of F011S020W25-26	1.00 of Key "B"
Amenities	Typical view of surrounding landscape Small pond, creek and/or exceptional view	1.00 1.10
Building site	Poor: Mostly steep, or wet ground, or unstable soils. Average: At least 50% level to gently sloping, adequately drained & wooded. Good; Mostly level to gently sloping, well drained and wooded.	0.90 1.00 1.10
Easements	Typical easements are considered in the base value. Other easements or trails across staked parcels to be handled based on a case by case basis.	To be determined

**Fly-in Lakes/Public Navigable greater than 10 acres in size.**

Generally, lakes less than 10 acres are not determined navigable or public unless specifically identified. The following lakes are determined to be public waterbodies.

The unnamed lake in the S2 of Section 15 and N2 of Section 22, Township 1 South, Range 19 West, Fairbanks Meridian.

The unnamed lakes in the SE4 of Section 2 and NE4 of Section 11, E2 of Section 11, N2 of Section 12, SW4 of Section 13, NE4 of Section 14, NW4 of Section 14, SW4 of Section 15 and SE4 of Section 16, NE4 of Section 26, S2 of Section 33, S2 of Section 34, and SE4 of Section 35, Township 2 South, Range 19 West, Fairbanks Meridian.

The unnamed lake in the S2 of Section 26 and NW4 of Section 26 and NE4 of Section 27, Township 2 South, Range 20 West, Fairbanks Meridian.

Topographic maps show these lakes to be small in size and capable only of accommodating the smallest of float planes or ski planes. The closest large lake which could handle all float planes is Mooseheart Lake, located 1.5 miles east of Section 1, T002S019W. This lake has an estimated run-out length of 1.1 to 1.4 miles, depending upon the direction of take-off.

**Adjustment Process:** An adjustment of less than 1.00 means the feature of the staked parcel is inferior to the hypothetical key parcel and requires a downward price adjustment. An adjustment of greater than 1.00 means the feature is superior to the hypothetical key parcel, requiring an upward adjustment. An adjustment of 1.00 means the property feature is similar to the key parcel, and no adjustment is necessary. The adjustments are multiplied to obtain a total adjustment, which is then multiplied by the estimated value of the key parcel to yield a value for the staked parcel.

## PREMISES OF THE APPRAISAL

### TYPE OF APPRAISAL AND REPORT

This is a complete, summary appraisal prepared in accordance with Standard Rules 1 and 2 of the Uniform Standards of Professional Appraisal Practice, Appraisal Foundation, and in accordance with Special Appraisal Instructions, DNR Remote Cabin Sites.

### PURPOSE OF THE APPRAISAL

The purpose of this appraisal is to estimate the current market value of the properties described in this report.

### INTENDED USE OF THE APPRAISAL

This appraisal will be used to determine the purchase price for parcels to be acquired under the Remote Recreational Cabin Site program (AS 38.05.600).

### CLIENT AND USER IDENTITY

This appraisal is prepared for the State of Alaska, Department of Natural Resources and the general public.

### PROPERTY RIGHTS APPRAISED

The rights appraised are the fee simple estate less the mineral rights reserved to the State of Alaska under AS 38.05.125(a). Fee simple estate is defined<sup>1</sup> as:

"Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

AS 38.05.125(a) states<sup>2</sup>:

*Reservation. (a) Each contract for the sale, lease or grant of state land... is subject to the following reservations: "[sic] the party of the first part, Alaska, hereby expressly saves, excepts and reserves...unto itself, its lessees, successors, and assigns forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every name, kind or description, and which may be in or upon said land...[and the right] to occupy as much of said land as may be necessary or convenient... to render beneficial and efficient the complete enjoyment of the property and rights hereby expressly reserved.*

### DEFINITION OF MARKET VALUE<sup>3</sup>

*The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.*

In accordance with instructions from the State of Alaska, market value for the appraised property is estimated in terms of seller financing typical for the property type as of the date of appraisal.

### DEFINITION OF EXTRAORDINARY ASSUMPTION<sup>4</sup>

*"an assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions.*

The report is based on the extraordinary assumption that all staked parcels have legal access across any staking area setbacks identified within the staking area. It is assumed that these setbacks will remain in state ownership. It is assumed that the appropriate platting authority will approve plats for all parcels staked under this program. We reserve the right to amend this report should unanticipated platting problems require changes that would significantly impact value.

<sup>1</sup> The Appraisal of Real Estate, 12th Edition, Appraisal Institute, 2001, p.69

<sup>2</sup> Alaska Statutes Title 38, Public Land Article 5, State of Alaska, 2002, pp. 590-591

<sup>3</sup> The Appraisal of Real Estate, 12th Edition, Appraisal Institute, 2001, p.22

<sup>4</sup> The Uniform Standards of Professional Appraisal Practice (USPAP), Appraisal Foundation, 2004, p.3

**EFFECTIVE DATE OF VALUE ESTIMATE**

The effective date of the value estimate is April 1, 2005.

**EXPOSURE TIME**

Exposure time is "...the estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal..."<sup>5</sup>

Exposure time varies with the type of property and changes with market conditions. The market for remote recreational properties has been sluggish for years. Supply has grown faster than demand. The market is somewhat saturated. Primary sellers are DNR, the University of Alaska, the Mental Health Lands Trust, Native allottees, and some boroughs. Remote parcels such as the subject typically require 12 or more months of marketing time.

Compared with competing parcels in the overall market for remote parcels, the market appeal for the subject parcels is average to poor. Considering exposure times for similar properties, appraised values for the subject parcels are based on an exposure time of one to three years.

**MARKETING TIME**

"Marketing time is an opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of an appraisal."<sup>6</sup>

Considering current market conditions and foreseeable supply and demand as of the date of appraisal, appraised values for the subject parcels are based on an estimated marketing time of one to three years.

**SCOPE OF THE APPRAISAL**

I did not inspect the staking area in the field. Aerial photographs taken by DNR Northern Region representatives from a June 2004 trip were provided. Physical features, access and trails were identified by the use of topographic maps, status plats, aerial photographs, DNR appraisal records and interviews with people who are familiar with the area.

Also, DNR appraisal records were searched for recent sales of similar parcels. Interviews were conducted with real estate agents, appraisers, and other individuals who provided data about trends in values, supply and demand. Sellers and buyers were contacted to verify sale prices and other transaction details.

After analysis of all available data, appropriate sales were selected for comparison with a key parcel of the subject properties being appraised. The market value estimate is based on the following assumptions and conditions.

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<sup>5</sup> op. cit. p. 83.

<sup>6</sup> *Uniform Standards of Professional Appraisal Practice 2001, Appraisal Foundation, p. 128.*

### ASSUMPTIONS AND LIMITING CONDITIONS

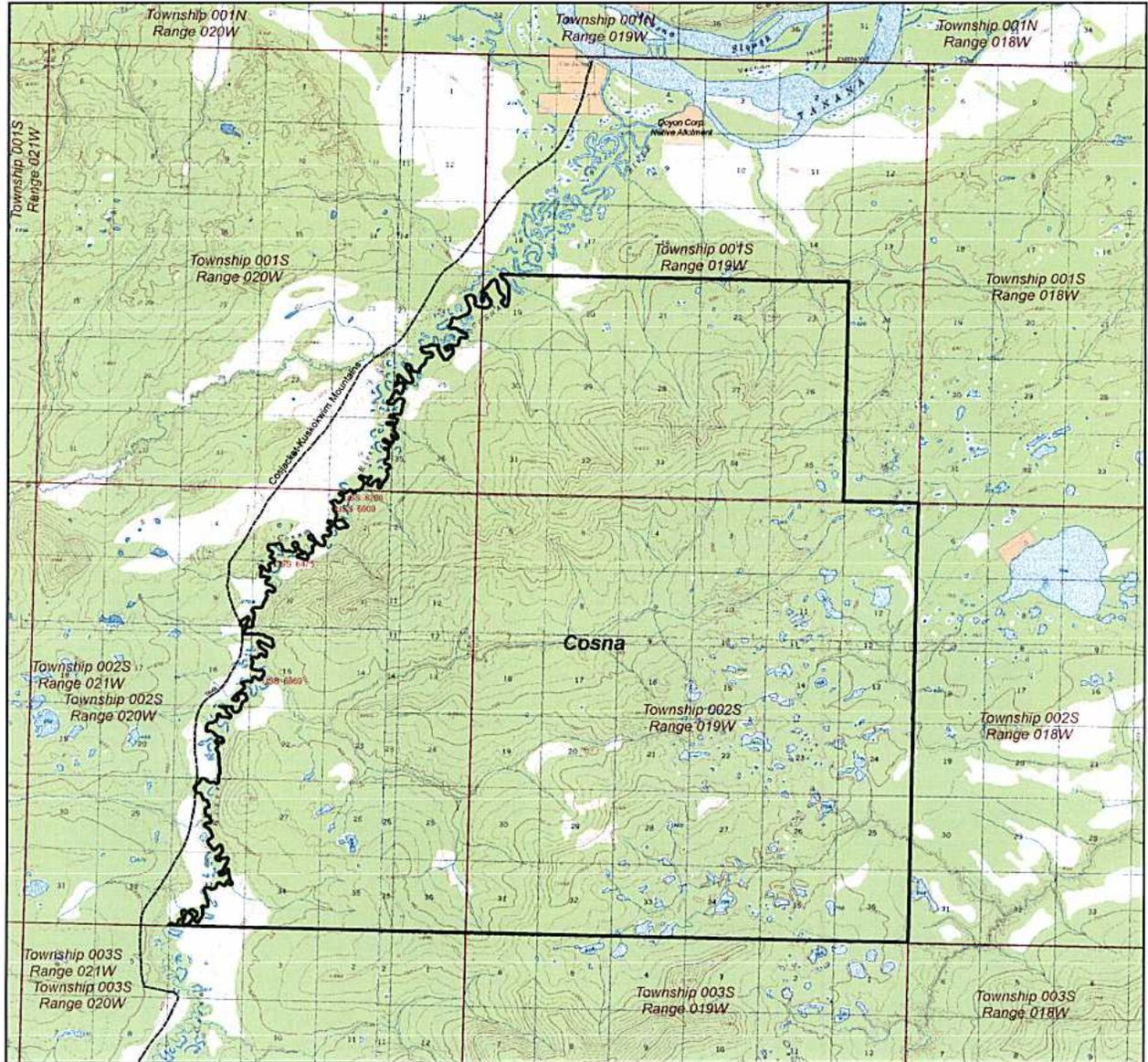
1. The property is appraised as vacant land without structural or site improvements.
2. Some parcels may contain saw timber but not necessarily in commercial quantities. The estimated market value does not include the value of commercial timber, if any.
3. The data and conclusions embodied in this report are a part of the whole valuation. Each part of this appraisal is only part of the evidence upon which final judgement is based. Therefore, no part should be used out of context and by itself alone.
4. The appraiser, by reason of this appraisal, is not required to give further consultation, testimony, or be in attendance in court with reference to the property in question, unless prior arrangement has been made and adequate time is provided to review the appraisal.
5. The estimate of value in this report is not based in whole or in part upon the race, color, or national origin of the present owners or occupants of the properties in the vicinity of the property appraised.
6. In this valuation various mathematical calculations were used to formulate the opinion of value. These calculations are only aids for the formulation of the opinion of value by the appraiser. Therefore, in the application of these calculations, certain arithmetical figures are rounded to the nearest significant amount.
7. The information furnished by others is believed to be reliable but it is not warranted for its accuracy. Plats of lease areas in this report are included for illustration only and may not be to scale.
8. It is assumed that there are no hidden or apparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions, or for arranging engineering studies to discover them.
9. Unless otherwise stated in this report, the appraiser does not know about the existence of hazardous materials or toxic substances, which may or may not be present on the property. The appraiser is not qualified to detect such substances. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required discovering them.
10. The report is based on the extraordinary assumption that all staked parcels have legal access across any staking area setbacks identified within the staking area. It is assumed that these setbacks will remain in state ownership. It is assumed that the appropriate platting authority will approve plats for all parcels staked under this program. We reserve the right to amend this report should unanticipated platting problems require changes that would significantly impact value.



DRAFT

Staking Map: Cosna

Remote Recreational Cabin Sites Staking Area No. 1105103



cb 5/24/05 cosna.mxd

**USGS QUADS 1:63,360**  
 Kantishna River C-3, C-4, D-3, D-4  
 T 1 S R 19 W, T 1 S R 20 W, T 2 S R 19 W, T 2 S R 20 W,  
 Fairbanks Meridian

This staking map is for graphic representation only. It is intended to be used as a guide only and may not show the exact location of existing occupied parcels or other off-existence and easements. Source documents contain the official record and should be consulted for all staking.

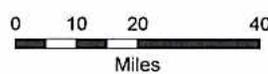
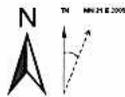
**Notes:**  
 Minimum parcel size: 20 acres  
 Minimum parcel size: 5 acres

**Staking authorization: 05**  
 Staking period: August 2005 to January 2006

- All parcels staked on land owned by the State of Alaska that contain land within 50 feet of a riparian or protected riparianly section the 50-foot buffer is 50-foot wide setback on each side of the riparian, which is adjacent to the flow of water for public purposes under 05 19 015. Parcels may not be staked over a riparian section.
- Parcels may not be staked across any public or riparianly water body. Parcels are subject to a 50-foot public access setback along the ordinary high water mark.
- Parcels are subject to a 100-foot building setback from the ordinary high water mark of all water bodies. Some water bodies may also have staking setbacks to create drainage basins.
- A staking setback is required from land-use-related improvements.
- A staking setback is required from any utility used for the public.
- Most surveys of a FWS, USFS, or BLM have survey monuments at each corner which can be used as reference points and corners when staking. Use the survey points for information on monument corner numbers, bear distance, monument height, the field data procedure used for the staking record.
- There are public access easements along most FWS B boundaries. Check the survey plans for additional information.
- Trail easements have not been outlined and their precise location may differ on the ground. Locating a trail easement area will generally be the responsibility of the staker.
- Unpublished staking are not authorized by the Department of Natural Resources. Use of staking on state land that are not authorized to be staked are at your own risk.
- Staking map shows riparianly section only. Riparianly section boundaries for public purposes in staking staking area boundaries. There may be riparianly section boundaries that are not shown on this map.
- Use the general staking guidelines and area specific regulations and staking guidelines for additional information.

**Legend**

- Staking Area
- Existing Parcel or Excluded Area
- RS 2477 and Other Trails



## PRESENTATION OF DATA

### Tanana Area Analysis

<b>Current Population:</b>	304 (2004 State Demographer estimate)
<b>Incorporation Type:</b>	1st Class City
<b>Borough Located In:</b>	Unorganized
<b>Taxes:</b>	Sales: 2%, Property: None, Special: None

### Location and Climate

Tanana is located in Interior Alaska about two miles west of the junction of the Tanana and Yukon Rivers, 130 air miles west of Fairbanks. It lies at approximately 65.171940° North Latitude and -152.07889° West Longitude. (Sec. 17, T004N, R022W, Fairbanks Meridian.) Tanana is located in the Ft. Gibbon Recording District. The area encompasses 11.6 sq. miles of land and 4.0 sq. miles of water. Tanana experiences a cold, continental climate with temperature extremes. Daily maximum temperatures during July range from 64 to 70; daily minimum temperatures during January are -14 to -48. Extremes have been measured from -71 to 94. Average annual precipitation is 13 inches, with 50 inches of snowfall. The River is ice-free from mid-May through mid-October.

### History, Culture and Demographics

Due to its location at the confluence of the Tanana and Yukon Rivers, Tanana was a traditional trading settlement for Koyukon and Tanana Athabascans long before European contact. In 1880, Harper's Station, an Alaska Commercial Company Trading Post, was established 13 miles downriver from the present site. In 1881, Church of England missionaries from Canada built a mission 8 miles downriver. Between 1887 and 1900, an elaborate school and hospital complex, the St. James Mission, was constructed. It became an important source of services and social change along both rivers. In 1898, Fort Gibbon was founded at Tanana to maintain the telegraph line between Fairbanks and Nome. A post office was also established, and several other trading posts developed around the turn of the century. Gold seekers left the Yukon after 1906. Ft. Gibbon was abandoned in 1923. The St. James Hospital was transferred to the BIA administration in the 1920s. During World War II, an air base was established near Tanana as a refueling stop for the lend-lease aircraft program. New hospital facilities were built in 1949; and during the 1950s, hospital administration was transferred to the U.S. Public Health Service. The City of Tanana was incorporated in 1961. The hospital complex was a major employer during this period, employing 54 persons with a payroll of \$1.6 million, but was closed in 1982. During 1982, Tanana incorporated as a First Class City in order to assume control of the local school system. The hospital facilities were remodeled for use as a health clinic, counseling center, tribal office, and Regional Elders's Residence.

A federally recognized tribe is located in the community -- the Native Village of Tanana. The population of the community consists of 81.5% Alaska Native or part Native. Traditional Athabaskan ways of life persist -- subsistence, potlatches, dances and foot races are part of the culture. During the 2000 U.S. Census, total housing units numbered 166, and vacant housing units numbered 45. Vacant housing units used only seasonally numbered 42. U.S. Census data for Year 2000 showed 100 residents as employed. The unemployment rate at that time was 23.66 percent, although 52.38 percent of all adults were not in the work force. The median household income was \$29,750, per capita income was \$12,077, and 22.95 percent of residents were living below the poverty level.

### **Facilities, Utilities, Schools and Health Care**

Water and sewer utilities are operated by Too'gha, Inc., a non-profit utility board. Water is derived from three wells near the Yukon River, and four watering points are available. In 1970, 55 individual wells were drilled, but due to permafrost and poor water quality, the project essentially failed. Nearly all residents now haul their own water from the washeteria and use privies and honeybuckets. In 1976, a piped water and sewer system was constructed to serve the Tanana Hospital, clinic, Regional Elders Residence, and now serves the Tribal council building. A new washeteria and water treatment plant were recently completed. Construction has begun to install pipes in 40 homes downtown. The landfill uses an incinerator, and provides recycling services. Electricity is provided by Tanana Power Company. There are 2 schools located in the community, attended by 80 students. Local hospitals or health clinics include Tanana Health Center (366-7222). The clinic is a qualified Emergency Care Center. X-Ray and pharmacy are available. Tanana is classified as an isolated town/Sub-Regional Center, it is found in EMS Region 1C in the Interior Region. Emergency Services have limited highway, river and airport access. Emergency service is provided by 911 Telephone Service, volunteers and a health aide. Auxiliary health care is provided by Tanana Tribal EMS (366-7170).

### **Economy and Transportation**

Two-thirds of the full-time jobs in Tanana are with the city, school district or native council. There are a number of positions with local businesses and services. BLM firefighting, trapping, construction work and commercial fishing are important seasonal cash sources. 17 residents hold commercial fishing permits. Subsistence foods include salmon, whitefish, moose, bear, ptarmigan, waterfowl and berries.

Tanana is accessible only by air and river transportation. The City maintains 32 miles of local roads. The City operates a dock on the River; barged goods can be offloaded at a staging and storage area. The State owns and operates the Ralph M. Calhoun Memorial Airport with a 4,400' long by 150' wide lighted gravel runway. Float planes land on the Yukon River. Cars, trucks, snowmachines, ATVs and riverboats are used for local transportation.

### **Manley Hot Springs Area Analysis**

<b>Current Population:</b>	73 (2004 State Demographer estimate)
<b>Incorporation Type:</b>	Unincorporated
<b>Borough Located In:</b>	Unorganized
<b>Taxes:</b>	No taxing authority

### **Location and Climate**

Manley Hot Springs is located about 5 miles north of the Tanana River on Hot Springs Slough, at the end of the Elliott Highway, 160 road miles west of Fairbanks. It lies at approximately 65.001110° North Latitude and -150.63389° West Longitude. (Sec. 17, T002N, R015W, Fairbanks Meridian.) Manley Hot Springs is located in the Manley Hot Springs Recording District. The area encompasses 54.3 sq. miles of land and 0.0 sq. miles of water. Manley Hot Springs has a cold, continental climate. The average daily maximum is in the upper 50s in summer, minimum temperatures during winter range from -6 to -21. Temperature extremes have been measured from -70 to 93. Average annual precipitation is 15 inches, with snowfall of 59.3 inches. The worst flood in the history of the community was in May 1956. Other floods occurred in 1961, 1962 and 1982.

### **History, Culture and Demographics**

In 1902 John Karshner, a mining prospector, claimed several hot springs and began a homestead and vegetable farm on 278 acres. At the same time, a U.S. Army telegraph station and trading post were built. The area became a service and supply point for miners in the Eureka and Tofty Mining Districts, and was known as Baker's Hot Springs, after nearby Baker Creek. In 1903, Sam's Rooms and Meals, now called the Manley Roadhouse, opened in the community. Ambitious farming and livestock operations in the area produced fresh meat, poultry and produce for sale. In 1907, miner Frank Manley built the Hot Springs Resort Hotel. The resort was a large four-story building with 45 guest rooms, steam heat, electric lights, hot baths, bar, restaurant, billiard room, bowling alley, barber shop and an Olympic-size indoor swimming pool which used heated water from the hot springs. During the summer, the hotel's private launch transported guests from steamers on the Tanana River. In the winter, an overland stagecoach trip from Fairbanks took two days. Due to the resort and area mining, the town of "Hot Springs" prospered with an Alaska Commercial Company store, a local newspaper, bakery, clothing stores and other businesses. Local estimates of the area's population in 1910 was more than 500. In 1913, this thriving resort burned to the ground. Mining was also declining and by 1920 only 29 residents lived in Hot Springs. The name was changed to Manley Hot Springs in 1957. A small school re-opened in 1958. In 1959, completion of the Elliott Highway gave Manley a road link with Fairbanks during the summer. In 1982, the state began maintaining the Highway for year-round use. A new resort with a small swimming pool opened in 1985, but closed in 1997.

A federally recognized tribe is located in the community -- the Manley Village Council. The population of the community consists of 23.6% Alaska Native or part Native. Native residents are Athabascan. During the 2000 U.S. Census, total housing units numbered 105, and vacant housing units numbered 69. Vacant housing units used only seasonally numbered 67. U.S. Census data for Year 2000 showed 36 residents as employed. The unemployment rate at that time was 10 percent, although 40 percent of all adults were not in the work force. The median household income was \$29,000, per capita income was \$21,751, and 9.7 percent of residents were living below the poverty level.

### **Facilities, Utilities, Schools and Health Care**

Most residents haul water from the wellhouse one mile east along the Elliott Hwy. Public businesses and facilities use individual wells. Water from a few of these wells is warm or hot. Individual septic systems or outhouses are used for sewage disposal. 15 homes have complete plumbing. The landfill is at mile 158 Elliott Highway, operated by the Manley Community Association. A clinic/washeteria is located 1 mile east of town, operated by the Manley Village Council. Electricity is provided by Manley Utility Company, Inc. There is one school located in the community, attended by 15 students. Local hospitals or health clinics include Manley Health Clinic (672-3333) or Fairbanks hospitals. Manley Hot Springs is classified as an isolated village, it is found in EMS Region 1C in the Interior Region. Emergency Services have highway, river and air access. Emergency service is provided by volunteers and a health aide. Auxiliary health care is provided by Fairbanks hospitals.

### **Economy and Transportation**

The local economy is based on a wide variety of small businesses, with many residents having 3 or 4 means of income. The Tribe operates the clinic. The Manley Roadhouse is open during summer months. A barter system thrives between residents. Government employment accounts for about one quarter of the total. Nine residents hold commercial fishing permits. Gardening, hunting and fishing provide food sources. Salmon and moose provide the primary meat sources.

The Elliott Highway is the primary means of accessing Manley Hot Springs, which is located approximately 25 miles northeast, (upstream) of the staking area. Goods and fuel are typically delivered by truck. The Highway runs through Manley to the Tanana River Landing, 3 miles southwest. The Tanana River landing is used to launch boats for fishing or transportation. Barge services are sometimes provided during summer months but there is no docking facility due to severe erosion. The State-owned 2,875' long by 30' wide gravel runway is available year-round. A new airport is under construction through FY 2005.

## DATA ANALYSIS and CONCLUSION

Highest and best use analysis identifies the most profitable and competitive use of the property. Therefore, highest and best use is a market driven concept that is fundamental to the valuation of a property.

### HIGHEST AND BEST USE

Highest and best use is defined as:

***the reasonably probable and legal use of vacant land or an improved property that is physically possible, legally permissible, appropriately supported, financially feasible, and that results in the highest value.***<sup>7</sup>

The highest and best use of a site must meet four criteria. The highest and best use of a property must be:

- legally permissible,
- physically possible,
- financially feasible, and
- maximally productive.

The value of land is generally estimated as though vacant and available for development to its highest and best use. The appraisal of improvements (when present on the site) is based on their actual contribution to the total value of the property. The appraised property is vacant and unimproved.

### HIGHEST and BEST USE of SITE as VACANT

#### **Legally Permissible**

There are no local zoning laws limiting the development of this parcel. Development of well and septic systems must comply with the requirements of the Department of Environmental Conservation. The key parcel could be developed for almost any legal use.

#### **Physically Possible**

The subject size and physical characteristics are adequate to support all reasonable and probable uses.

#### **Financially Feasible**

Surrounding land use is primarily recreational. Development of the key parcel depends on the amount of resources the owner is willing to allocate for recreational needs.

#### **Maximally Productive**

Surrounding land use is primarily recreational. Maximally productive use is the use that produces the maximum return from the proceeds of a sale or lease.

#### **Highest And Best Use Of Land As Vacant**

Based on the foregoing analysis, the highest and best use of the subject parcel as vacant would be for almost any legal use, primarily a private recreation cabin site.

<sup>7</sup> The Appraisal of Real Estate, Twelfth Edition, Appraisal Institute, 2001, p305

## SALES COMPARISON APPROACH

### KEY PARCEL METHOD

In appraising a number of similar parcels, it is accepted appraisal practice to appraise a key parcel that is most representative of all the parcels being appraised. The key parcel may be a hypothetical parcel or an actual parcel. The value of the remaining parcels is then based on a comparison to the key parcel. This methodology replicates typical developer thinking.

### EXPLANATION of ADJUSTMENTS

DNR appraisal instructions for the Remote Recreational Cabin Site program require the appraiser to develop and use quantitative adjustments. Ideally, the value difference for any price adjustment is measured by comparing prices of paired sales that are very similar except for the feature of comparison to be measured. When market sales do not support quantifiable adjustments for differences between the property appraised and the comparable sales, the appraiser must use personal knowledge of overall trends, opinion surveys, and/or judgement in making adjustments. The conventional sequence of adjustments is property rights conveyed, financing terms, conditions of sale, time, location, and physical features.

An adjustment of less than 1.00 means the sale feature is superior to the appraised property and requires a downward price adjustment to indicate the value of the key parcel. An adjustment greater than 1.00 means that the sale feature is inferior to the subject, requiring an upward adjustment to indicate the value of the key parcel. An adjustment of 1.00 means the sale feature is similar to the key parcel, and no adjustment is necessary. The adjustments are multiplied to obtain a total adjustment, which is then multiplied by the sale price to indicate the value of a key parcel.

The same adjustments and procedures are applied to the key parcel value to indicate the market value of a parcel being appraised, except the direction of adjustment is reversed when comparing appraised parcels to the key parcel. Superior features require a positive adjustment compared with the appraised parcel; inferior features require a negative adjustment. The following is a summary of adjustments and how they were estimated. Detailed information about the comparable sales and the adjustments is contained in the Addenda.

### Staking Area

Access to the general vicinity is limited to river systems, primarily via the Tanana River from Tanana or Manley to the mouth of the Cosna River. The staking area can be accessed from the Cosna River, which commences approximately five river miles upstream from the Tanana River. Overland access from the Cosna River to the staking area from the Cosna River is gained by the Mooseheart Mountain trail heading in a southeasterly direction or the Cosjacket – Kuskokwim Mountain trail, a recorded RS 2477 route. The RS 2477 route near the confluence of the Cosna and Tanana Rivers is through a native allotment. Do not use this portion of the trail. This access is practical only during winter months. The trail is on the opposite bank from the staking area. Access within the western portion of the staking area is via surveyed section lines.

Due to the confidentiality of sales information in the state of Alaska, the valuation section of the report is unavailable online. The entire report can be reviewed at the DNR Public Information Center:

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Business hours 10:00 am to 5:00 pm M-F.

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**In Juneau**

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