TANANA BASIN AREA PLAN

PHASE I
RESOURCE INVENTORY

SETTLEMENT ELEMENT

STATE OF ALASKA
Department of Natural Resources
4420 Airport Way
Fairbanks, Alaska 99701

U.S. DEPARTMENT OF AGRICULTURE
Soil Conservation Service

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Chapter 1

Introduction

This report completes Phase I of the Alaska State Department of Natural Resources Tanana Basin Area planning process. The report inventories and analyzes background information on settlement in the Basin and will serve as the basis for the continuing phases of the planning process.

This information is part of a resource inventory of seven resources including fish and game, agriculture, forestry, minerals, outdoor recreation, settlement (land disposals) and water. The information included in this report was gathered by the Tanana Basin Area Planning staff of the Division Land and Water Management. People who participated in the production of this report include Susan Todd (Project Manager, Tanana Basin Area Plan); Chris Guinn (Disposal Section,); Bill Copeland (Planning and Coordination Section); Delores O'Mara, Rob Walkinshaw, and John Weddleton (Resource Allocation Section). 479-2243

There are seven chapters in this report. Following the introduction, the second chapter presents major issues about settlement and land management. The third estimates the demand for settlement land, and the fourth discusses the areas appropriate for settlement. The fifth chapter examines the benefits and costs of land disposals in the Basin and chapter six compares demand and supply. Finally, the seventh chapter makes recommendations concerning state land allocations which would be preferable from a settlement standpoint.

Chapter 2

Issues and Local Procedures

ISSUES CONCERNING STATE LAND MANAGEMENT

I. INTRODUCTION

Issues and local preferences are important pieces of information which must be incorporated into the planning process. Issues concerning the use of a specific resource provide a focus and framework for the planning process; local preferences show how the public feels these issues should be resolved. In this section of this report, issues and local preferences are documented for incorporation in the planning process through the work of the Planning Team Members.

The issues identified in this chapter were collected and summarized from three sources. The first source, the Statewide Natural Resources Plan was prepared by DNR to give policy guidance for state-wide management of resources and to present summary information on those resources. The issues included in the statewide plan were identified by the division or agency within the state responsible for managing a specific resource.

The Tanana Basin Plan sketch elements were a second source used to identify issues. The sketch elements were developed in 1981 to provide a starting point for the Tanana Basin Area Plan. The issues from the sketch element are more specific to the Tanana Basin than the issues in the statewide plan. The issues identified in the sketch elements were based on conversations with agencies, resource experts and public interest groups.

The public meetings held in the Tanana Basin during the spring of 1982 was the third source of issues for this chapter. Planning team members, after reading the comments from the public meetings identified a series of issues concerning the resource they represent.

Local preferences about how these issues should be addressed were determined from various sources. One is a series of community originated land use plans. Several communities are currently working on proposed plans for state land in their area; others have already submitted proposals to DNR. These local land use plans can provide a clear indication of what a community prefers. This is particularly true when a proposal receives endorsement of village councils, city councils, native corporations, and other interest groups in the area.

The possibility of doing local land use plans was mentioned at the public meetings and in a newsletter that was sent to all communities. Only a few of the communities, however, have decided to submit proposals. Those which have are on file with the State Department of Natural Resources and summaries are included in this report.

The public meetings held in the spring of 1982 are the other source of information on local preferences. The notes from these meetings were given to members of the planning team who then developed the summaries included here. These represent the planning team members' understanding of how residents want state land in their area managed.

The following issues concerning disposals were drawn from the public meetings.

ISSUE 1. The amount of land offered.

ISSUE 2. The quality of land offered.

ISSUE 3. The location of land offered.

ISSUE 4. The size of the parcels.

ISSUE 5. The effect of habitat classifications on disposals.

ISSUE 6. The effect of forest classifications on disposals.

ISSUE 7. The effect of mineral development on disposals.

ISSUE 8. The effect of agriculture on disposals.

ISSUE 9. The effect of disposals on fish and game.

ISSUE 10. The effect of disposals on recreation.

ISSUE 11. The effect of disposals on forestry.

ISSUE 12. The effect of disposals on mineral development.

ISSUE 13. The effect of disposals on agriculture.

ISSUE 14. The effect of disposals on access to the backcountry.

ISSUE 15. The effect of disposals on public service costs and tax revenues.

ISSUE 16. The effect of disposals on future state land management.

LOCAL PREFERENCES

This chapter summarizes concerns about land disposals expressed at a series of public meetings held in the communities of the Tanana Basin in the spring of 1982. Comments are transcriptions from the meetings.

Anderson **5 persons attended the meeting**

Don't put people where they can't make a living.

Disposals have been overly regulated to prohibit private enterprise such as developing a ski lodge, or bar, or roadhouse on your land.

It seems like the state has decided that no one should make money on disposals.

Multiple use of state lands is possible with disposals and agricultural disposals.

People should have the right to use the land as they choose.

Most of us live here because we prefer fewer regulations.

Disposals have been in the bogs.

People should not be forced into a homeowner's association. State should supply electricity rather than forcing people into a homeowner's association.

We are not allowed to subdivide property.

Disposal prices are too high.

It costs a great deal to get out there to a piece of state disposal land, let alone the price of the land. The price should be adjusted to allow for the cost of access.

Roads to disposals are very poorly planned.

We need green spaces between disposals; areas that are not going to be developed.

Population density should be regulated through disposals. The state should look ahead.

Anderson (cont)

Disposals are inaccessible.

Don't put disposals in swamps.

Disposals on floodplains are not a problem.

There are trails and woodcutting areas around 7 Mile Lake which should be utilized for disposals.

The state needs more field checking on disposals.

This community has no room or land to grow.

We wouldn't be here if these current disposal rules applied when we first came to the area.

Cantwell **6 persons attended the meeting**

What the hell do they think they are doing? People have to be insane to buy some of this land. Sell fewer subdivisions. Make larger pieces of land available.

Give clear fee simple title to the land. Don't regulate what can be done on the land.

We need land disposals.

We need more homesites in the Minchumina area.

The state should open all land to private ownership.

The thing that is missing from disposals is the notion of carrying capacity; small disposals are not adequate to support a family.

No sewage treatment facilities included in the disposals.

I'd hate to see the cost to get access to Minchumina.

Disposals in rural area should be much larger and not just for recreation.

Most people want larger plots than what the state is selling.

I'd like fee simple title to the land with the right to use it as I like and enough room for a house. Nothing less than a 40 acre tract.

Cantwell (cont)

They put tracts in as if it were a suburb of Chicago; straight lines right through a swamp or steep cliff.

They just like a neat looking map with straight lines. The placement of disposals seems to have nothing to do with the land suitability.

Land must be closer to access.

To sell subdivisions just put lots of homes together like a town, but people don't want to be in a town when they buy land out here.

Sell larger parcels so that conflict between disposals and recreation can be eliminated.

We've got all the ground in public ownership that we need.

Disposals should recognize popular trails. We need a kind of greenbelt between the trails and disposals.

You can't get to many of these disposals. They don't have access.

Tell the disposal people to consult local folks about the layout and location of disposals. Locals can also give information on weather and scenic areas.

The state should not have to protect remote parcels from fire or flood.

I cannot stress strongly enough the futility and unfairness of removing waterfront property from land offerings. The reason given was so that people could picnic and camp where they wanted. I submit that picnic and campgrounds should be reserved but to reserve all waterfront lands to this use is not only unrealistic but will contribute to the creation of another Homer Spit. One has only to visit there in summer to realize a description would be libelous, scandalous and indicative of the misuses the waterfront of our state would be in for. People who commit themselves to establish a home in the bush need access on navigable rivers and streams. They need incentive for this expensive and difficult lifestyle and should take precedence over recreational land use. Tourist business would be enhanced by those who would build lodges or maintain campgrounds, boat or aircraft services or waterfront parcels . . . Alaskans own this land, not bureaucrats, and have right to the best not the worst which has been offered lately.

Cantwell (cont)

Water from your property has to be near. You have to be able to get to water from your disposal.

Past disposals - Yetna/Skwentna drainages will be grabbed by Anchorage people for recreation use/fly-ins. That's fine but get some land to people who can live there and make something of it.

Not necessary to have such large setbacks on river frontage to allow for public use.

Provide for legitimate access to disposals. Write it into the sale.

Let competitive bid set prices of disposals. Make more land available to bring prices down.

Anything to release land is an improvement over the status quo. We've only got 13 subdivisions in the area. No land is available.

The state is doing pre-surveys. This places a prior investment in subdivisions which shouldn't necessarily be sold.

Human impact on the habitat and the land is just a chicken scratch. We won't hurt anything. Disposals and settlement won't conflict with habitat.

There is some good residential ground on the Denali Highway.

Delta Junction **9 persons attended the meeting**

State tract development and disposals within municipalities have been plunked in city limits; but the state didn't establish the subdivision in accordance with overall design of our land planning process.

State failed to design and put in road on disposals in the area. This puts financial burden on the city. We feel very strongly that the state MUST put roads in before lands is sold; or state should give sufficient money for construction to city government. It's a real problem.

There is more demand for land than there is land. Take Tanana Loop Area. People said they didn't want this much land, but they saw it was the only way to get some land so they bought really large lots. I think there is need for more disposals.

Delta Junction (cont)

But we need a better disposal balance. Lots who didn't want agricultural land bought it. We need small tracts that don't require clearing. 5-10-20 acres where someone could pitch a tent and develop the land at their leisure.

There were a lot of people who hemmed and hawwed for remote wilderness areas but I doubt they are taking them. People want to drive to their land and get an electric line to it.

Mining claims as a vehicle to get a homesite shows that there is a demand for small tracts.

There is a need for land along rivers and lakes. Selling land there makes it difficult to keep recreation and wilderness intact but there should be a ratio where these settlements can be mixed with the other uses.

As soon as people get to remote areas, the state should anticipate that there will be demands for roads and utilities.

Dot Lake **6 persons attended the meeting**

Nothing can be done to make trapping compatible with disposals although remotes wouldn't impact as much. The real impact is from private property signs forcing disorganization of your trapline. People moving in increases pressure on game. We don't know how many animals people are taking and we have a hard time regulating an area to insure that there will be animals for next year.

Trapping is important to the people here. Lower 48, new people come into the area and trap, on my trapline. Find traps hanging on a tree. We have been using this area for hundreds of years.

ANCSA has provisions for protection of subsistence sites that people use seasonally and where people live. With a subsistence site within the corporation boundary we can get title to our land but outside the boundary and on state lands, they won't give us title. Does the state make any consideration for historically used hunting and fishing camps for subsistence?

Dot Lake (cont)

You should set a mechanism into the plan to provide for subsistence use. You should show that we have used this land for hundreds of years (If you put fair market value on it, like my moose camp, we should be given the opportunity to buy it. This would be showing a preference, but so is an auction. In an auction you are giving preference to those with the most money.)

People are living out here to live this lifestyle and get away from cities.

You can have overkill -- if too many people come out here no one will be able to enjoy this area.

What you don't want is 50 people with little lots who can come for a weekend and hurt the moose populations and then return to Anchorage.

There is limited employment or income here. People have moved into the western culture to a certain degree, but they still live off the land.

What is the percentage of land taken that is offered? A lot of it is not taken so why reoffer it; or sell more in this area? Why keep adding land when it is sitting there and not being sold? Robertson is an example of this. It has been up for sale for 2 years and no one takes the lots there.

Study the impacts of disposals on local areas; the impact on fish and game, minerals, communities and state residents.

Look at past figures of land taken to get the sense of the demand for land.

Don't sell land for speculation. The state shouldn't compete with private enterprise in the land selling business. Let the private market take care of the land.

There is concern over disposals that are on hold and aren't going to be addressed in the context of the TBAP. What are you going to do about those that are on hold only until this fall?

Slow process down so that plan will provide framework for addressing disposals. Put hold on disposals until plan is complete. You will have the context set to guide disposals once the plan is done.

Dot Lake (cont)

Surveys on demand for land are not good. They ask Fairbanks residents but not other residents. Also people will say they want land on the terms that the state offers.

State is establishing communities by selling subdivisions. Then the communities become eligible for revenue sharing and state grants. This will be a big cost to the state. What is the social impact of these areas and communities being developed? (Like Sam Creek) The Dot Lake school couldn't handle all the new people. This creates a problem for Dot Lake planning efforts. Also it will cause increased competition for employment.

People don't want to live in subdivisions. People want to live here to get away from that. Offering subdivisions forces people here to move away because they don't like more people moving in and the changes that accompany them.

Pipeline right of way conflicts with disposals. Until the corridors and project is decided on there shouldn't be any disposals in the area.

Demand for land should be centered around local communities where the land is wanted. People in Anchorage and Fairbanks say they want land but they don't want it at Dot Lake. They want it in or near Fairbanks. Base disposal on demand in the area where the demand is.

In Dot Lake there is a demand for land but not subdivision; scattered remotes, maybe 20 acres in size is what people want.

Find suitable land in specific areas and then leave the other land alone.

To me, private recreation lots here should be around 5 acres.

To me recreation lots are one five acre lot here and then 5 miles down the road another 5 acres. To me that's private recreation, not to have subdivisions all over the area.

Sell land on an "I want and I am going to use" basis. Most of the land the state sells people are not really using.

Don't subsidize private enterprise by selling land to speculators.

Dot Lake (cont)

The impact of disposals on Fish and Game and subsistence should be addressed.

Don't provide land for people to use as a stopping off point for hunting.

Consider the trade-off between selling land and the public value of keeping that land.

Offer land at auction rather than lottery.

Lottery the land rather than auction so that everyone has an equal chance.

Dispose only of lands that are patented. It is hard to get loans for TA'd lands. Don't sell them.

What are the plans for lands that have been sold that aren't in the long run patented.

When state goes into remotes put in buffer zones between private lands. Protect people who went there to get away from having people right up against their land. Also a buffer would stop the chance of people staking on private land, like has happened with some of these remotes, especially when it hasn't been surveyed.

Put the whole area on hold between Johnson and Robertson Rivers; until the plan is complete.

People want land for different reasons than for the ones the state has offered land for.

Farms in Delta and Clearwater -- it's too bad, that you can't use them.

Focus agriculture disposals on subsistence agriculture.

Game habitat and trapping are most important to people in this area.

Traplines aren't trails. They are areas. They are not linear. Trappers depend on game from surrounding areas, not just the line cut through the woods.

Dot Lake (cont)

A trapping trail (getting to the area) is different from a trapping area. When you protect trapping during disposals you should remember this. It is no good to have only the trail protected. What good would a trapline trail in the middle of Fairbanks - like 2nd Avenue, be? You've got to protect the trapping areas as well.

Traplines are walked on by people getting into remotes. I brush a trail and spend time working on it and then people use it and ruin my trapping.

The plan should assess the local social and economic impact of any action on the local areas and communities. Will the plan change the cultural and economic and social lifestyle in the area? And if you are changing and impacting it when the people want things to remain as they are, are you not infringing on these people's rights?

Craig Lake would be nice for public and private recreation.

Recreation to me is holding the land in public ownership. Put things in wildlife habitat and our recreational needs will be protected.

Don't classify things public recreation. That draws attention to it. Just leave it as habitat. Habitat will protect the recreational needs of people.

The problem with rest areas or campgrounds is that they really impact the area. People come in and hack at trees for firewood and just ruin the area. Whereas if you leave things in habitat, people are more dispersed and start to get a favorite campground that they come back to year after year and they take care of it.

Send Delta Plan and notice of meeting to Ted Charles. Dot Lake Native Association, Box 441, Tok 99780.

Send maps to Virgil Hilliker, mile 1361 on the Alaska Highway via Delta Junction.

Healy **5 persons attended the meeting**

Develop a state policy on state land disposals in fire danger areas.

Concentrate disposals and provide fire protection for that concentration. Don't make disposal areas spotty so that exorbitant amounts of money are spent to protect areas from fire.

Healy (cont)

People ought to accept responsibility of land without fire protection or land on the floodplain. Write a clause in the deed that says the state can't be sued if a fire or flood ruins their property.

I don't like the new rule that you have to at the office to get a disposal. It is discriminatory and favors the rich. Give locals first crack at the land in the area. There are other mechanisms for giving locals a good chance.

People want land with access. Develop disposals first that are near the road.

Concentrate development of disposals to minimize costs of schools and other services. Don't scatter disposals all over the country without insuring that people wont't expect the state to provide schools and all sorts of other services.

Provide woodcutting areas for disposals. Consider houselogs and firewood in developing disposals.

Insure public access and trails through disposals.

Disposals, if dispersed, will conflict with trappers. Leave access through disposals open to trapping. Include some legal mechanism to allow continued trapping. Include covenant in sale to insure trapping can continue.

Assess social impact on existing settlements when large numbers of people move into an area and there is a need for more schools and services.

Also assess the impact of newcomers on availability of firewood and houselogs.

I'm really big on this fire thing. It bugs me when I see the state put a disposal out there somewhere and then the state spends millions of dollars to protect them. People need to be made aware of the costs of these things. I doubt many people think of this.

Designate one area where there is no government, no rules but also no government aid, assistance or bail-outs. Residents could realize the ultimate ALASKAN frontier dream of doing what they wanted but at the same time take the consequences.

Lake Minchumina **18 persons attended the meeting**

Don't block off access to the lakeshore.

Cease any further disposals here. We don't want them.

Only a few people have been staking on this last disposal out here. Why offer more if there is no need for it. There is no sense in it.

Don't keep opening up remotes in this area.

People weren't demanding lots in this area in the last lottery.

Wait and see impact on community, before you can dispose of any more land.

Limit the number of entries in the remotes.

Stop and take a breather and look before you dispose of more.

Don't open up again until you've assessed the impact of the developments on this community.

We had a plan done and submitted classification requests to DNR. We did best we could to be reasonable, but it hasn't gotten us anywhere.

Hurry up the plan. There are enough of these meetings. Classify the land on the basis of the plan we did.

There is the old Herron Trail; through the remote disposal. Leave it open (See Fran Holmes for more information).

It'd behoove the state to make disposals available to people who know the land.

Where is the access from on that remote? People can really cut up the country. Plan the access out carefully, and make sure people know where it is and use it rather than cutting their own access across the country.

The area is pretty well saturated for trapping. What are people in these disposals going to do for a living? What about water up there? People are going to have a hard time.

Why have disposals close by so that they can undermine the community.

Sell land close to the road; in the Boroughs but **NOT** here.

People will be living on food stamps and garbage if you keep selling land.

Look at the demand for the last disposals to get a sense of the demand in the area now.

Open the area up to homestead or homesites - let people find the good land.

The more people we have the more need for wood. The situation here may get really critical.

Reasons we're here is that we like it. We don't want a few carpet baggers coming in and ruining the community.

The area is saturated by disposals.

That new state rule that you have to be at the drawing to get a parcel is a good one but the place they had the last drawing (Healy) was goofy. We couldn't get there. We'd have to hitch hike or something from Fairbanks; we don't all have our own planes you know. Even those people who did have a plane couldn't get into Healy because of the weather. That just wasn't fair. It would have been better to have the drawing in Nenana or Fairbanks. We have scheduled services to those places. Have it at Lake Minchumina next time. Second best would be Nenana or Fairbanks, but don't do it at Healy again.

There are a few trails in the area of that remote disposal. Most of them are outlined on the topo maps. Those trails should be protected.

With that remote disposal, you should set aside some of the land as a buffer that circles the subdivisions and the remote for a woodlot. Those people are going to need wood.

I have a trapline running through that disposal. My wife tried to get an allotment in there on our line but the paperwork got fouled up and we never got the land. But our line still runs through there. I don't want any preferential treatment or anything but I was wondering if the state could do anything to protect my trapline when they dispose of that land? (See Tom Flood for more information.)

No more land sales for 10 years. Let us absorb the impact of previous sales.

See what happens and then decide whether to sell small quantities regularly.

People want land for the lifestyle but if they continue the sales the lifestyle is gone - either an extremely limited number can enjoy it or nobody can. If it doesn't stop, the very reason for doing it will be destroyed.

The land sale system is erratic, unorganized and mixed. Before they mess up everyone else they should get their own act together. Policies are temporary. The land is forever.

The people of Minchumina are unanimously opposed to any land sales or disposals in any kind in any place around the lake.

The North shore of the lake (Sec. 22, 23, T. 11 S., R. 23 W.) is unsuitable for settlement, timber or other uses, as it is primarily muskeg and black spruce. It is inhabited by a variety of animals and wildlife habitat is, we believe, an appropriate classification.

Manly Hot Springs **8 persons attended the meeting**

Open land where roads already exist. Don't put disposals way out in remote areas.

It's appalling to me the way the state has selected lands for disposal. Remotes haven't done anything for people in the immediate area.

Some of us don't want any land disposals within 100 miles of us, like me; but also, at the same time I'd really like a good piece of land right in Manley. Land is awful tight in this area right around Manley.

I'd like to know if they found areas of good soil in the area: they could place disposals there (small agricultural disposals).

In Eureka a few people have wanted land for years. The state has it. They should offer some disposals up there.

Consider the impact of land disposals on native lands, particularly where people use access across native lands. In fact, the state even put a subdivision on Bean Ridge Corporation land.

Remotes - why offer when they might be right by an oil well?

Don't put all land disposals in this area--spread out the burden of the disposal program. Already they put 60,000 in this area and none of it's helping people here. State doing us a great disservice.

A lot of these land disposals need a helicopter to get into.

One guy's tried ten times to get to some land he owns and has gotten there only five times.

Seems kind of outrageous when the state creates mining vs. disposal conflicts. The state should look at what's going on in the area at present before they dispose.

There are people here that want land nearby for sale.

I would like to stop a lot of these disposals. They are lousy quality and they disturb the ways we've been using the land in the past. You should sell accessible land.

Give local preference- Anchorage and Fairbanks residents shouldn't have an equal chance.

We don't want a subdivision of Fairbanks here.

Now that we are here we want the place to remain small. We want to see preference as long as it's us. It's a problem. I realize the problem and don't know quite how to resolve it.

Mentasta Lake **5 persons attended the meeting**

If you sell land it will bring more people in. I don't think we want them in. We have problems with people on our land. There are too many problems already with people on our traplines.

If state brings people in, it will create trespass problems with Native lands.

Put disposals from Clearwater to Tok. South of Tok there are problems. People fish just south of Tok and it is swamp there.

Would like to see more disposals in the Tok area.

Minto **40 persons attended the meeting**

State shouldn't do anything with land.

The first guy got land - the another guy came in - we have to move on - it's the law.

I have good land for hunting, berries, some trapping - that's all; that's all I have.

We got the land first. I just want to make that point and make you remember that.

Why did the state get land? It's a good question. No one can answer it. The state has too much land and no one ever has given me a good reason why the state got it.

You are a beaver--that one over there in the red coat--a muskrat. (laughter.)

We don't want to lose the land; that's all.

We got a graveyard there. Those people have land. They have land over there. We've been on that land a long time.

State has too much land. We want that land. It's our land. We'll show you.

We have trails all over the land.

Graveyards are important. We want to keep lands where they are.

We don't want the state to dispose of land in any area.

You state people want roads and wells and developments. It's not what we want - we want a place to fish and hunt ducks.

Land disposals conflict with traplines.

Disposals should be around Livengood and on the Yukon, near roads. We wouldn't care if they were there.

The government says we get land; but they lie to us, they didn't give it to us. We got to get our land. The state shouldn't have our land.

Don't sell it - leave it as it is. DO NOTHING with lands. Nothing. Don't do nothing on it that hurts fish and game.

A lot of people still live off land. If they start disposing close to village, it will hurt these people.

There is a problem with people using an area. The public used one area and now I can't use it. Where my father had hunting camp, now state owns it and leases it to a man right next to my Native allotment. He says there was no tent frames and state leases the land to him. My grandfatner had that land. Why can't I have the land when he can?

Because people aren't using land year after year, it doesn't mean they don't use it. Historically, they have used it as their grandfathers did but now people come in and take over because you don't use it one year. It's not right.

All the papers on my claim to that land were burned in a fire in Nenana. But it was filed on. And now I can't get it. That other man has it. What can I do to get it?

Get village corporations involved in this. They have plans for their lands. They should be here for this meeting.

We should have strong say in what happens to our land.

We want to know when white men get that land. The state should tell us. We want to know.

I'm against state lands. They are pouring muck into our lands--all they're doing is dumping much in our rivers and not doing anything about it.

Hold off on disposals or development just for a few years while we get out feet on the ground. All the people coming in, the roads, the change. The old people know it is coming. Just let it come slow. Give them a chance. It's so hard for them. Put land in forest, but don't develop it for 5 or 10 years. We know change is coming. We're trying; building the lodge, getting jobs in the village, but give us some time for the old people.

Nenana **26 persons attended the meeting**

Need an idea of price ahead of time.

Disposals should go to Alaskans.

Alaskans can't compete in bid land sales. Sell small plots so Alaskans can compete.

Nenana Ridge near the highway should be for disposals for residential use.

Put disposals on Nenana Ridge back from the road to keep the route scenic.

Make disposals affordable to those that have been in the area a long time. Orient program to residents of local communities.

Access should be factored into disposal decisions.

Go slower with disposals. Don't offer so much land so fast.

Include service costs in disposal decisions.

Access, power, water should be available for state land disposals at a reasonable cost to the buyer.

Build roads into disposals and include construction costs in the price of the land sale.

Offer more disposals that have river frontage.

Use both lottery and outcry auction methods for the sale of land.

Don't sell lands with 20-40% slope. It's too hard to build on. Sell more level land.

Before disposing of any land make sure that the land is capable of being built on.

Don't sell land that is swampy; have the state fill the swamp and include the cost of the fill and construction in the purchase price of the land.

When selling highway frontage property, let purchasers know and stress future plans for the land for sale and surrounding land and the restrictions place on the land so buyers know what they are getting involved in.

Greenbelts along highways create problems for access to disposals.

Incorporate local desires and review in planning for subdivisions.

Protect traplines and evaluate impact on them when disposing of lands and building roads.

Want river frontage property that is cheap and has a place where you can pull a boat up to.

Have not been enough disposals in the area.

Disposals have not been of good enough quality.

Disposals are overpriced and don't have access.

There isn't enough timber to build a cabin on disposal lands.

5 acres are not enough for a remote site.

Need more remote parcels of up to 40 acres.

Access is a problem with disposals that should be considered in planning disposals.

5 acres are only good for recreations sites.

Density of 5 acre lots will upset the ecology.

Northway **27 persons attended the meeting**

Keep people on the road system. Don't sell land way out in the country.

Sell land where people can get to it without making new roads and tearing up the land.

Don't put people out of their subsistence area. Don't do anything that will cause people to not be able to use their area where they do subsistence hunting and trapping.

Some land is needed in this area for disposals near town.

Offer state land close to existing communities which can be used to build a residence on.

The route between Nenana and Fairbanks is beautiful so don't dispose of it.

Don't do much with the land. Don't do anything that attracts outsiders.

I agree that a few disposals near Northway would be nice. There are relatively few people in the market for land here. It has been enjoyable the past two years since comming to Northway. We would like to have some land to build a permanent structure, plant a garden; something to call our own.

I know that people wanting state land opened for disposal are in the minority in our area, mainly because the majority of people here have their own land and have no real need for state land disposal. Basically, the people desiring land are the teaching staff at the school, some FAA residents and the village pastor - the non-land owners of the community. I believe the only chance we would have of convincing the majority of people to support opening land would be to propose: 1) a limited number of 5 to 10 acre plots; 2) the plots should have direct highway access (so as to avoid going across other claimed land, ample access to

land behind these plots; 3) dispose in such a way as to favor local residents or those planning to reside here (such as homestead disposal). This would discourage "outside" land speculation and tend to favor people who are committed to the community. Most people here do not want "outsiders" buying up land and would vehemently oppose any plan which would favor such - they might support disposal of a few acres to people who would live here.

Tanacross **2 persons attended the meeting**

-Look for alternatives. Don't pick lands to sell that are critical to people here. It seems the state always picks lands close to us. Go near Tok. There is lots of land the state can use near there and jobs would be easier to find.

Keep disposals away from habitat areas.

Send us a map of the area so we can show you where **NOT** to have disposals, and where they are **OK.**

There is other land that doesn't conflict with our uses that could be used for disposals.

Put disposals close to the road, where there is access, along the Glenn Highway, not in habitat areas.

Tanana **5 persons attended the meeting**

I like the land the way it is. I'd like to have a 100 mile radius with nothing happening--the land left alone.

I'm against any kind of land lotteries.

Population increases pressures on us. I don't want to see that.

The Cosna/Zitziana disposals--if people want land in there; it won't affect us--at least I don't think....

How do people find out about disposals? Send us information on land sales. We never know about them.

Put us on mailing list. People from Tanana should have a chance to buy land, be we never know about it.

The state selling land here, personally doesn't bother me. People should have land to live on--as long as they respect things and as long as they are at least 100 miles away.

I wouldn't mind if they had land in town for people to purchase. We're hunting for land to buy in town here.

Tetlin **5 persons attended the meeting**

Open up areas near Delta for settlement. Let people all pour in there. Concentrate development.

If there are too many people in this area they'll destroy the land, take it over and choke us out.

Don't bring lots of people in.

Don't place disposals in areas where there is poor access or no access. Disposals need to be at least 40 acres in size.

Don't sell land.

No reason to sell the land.

Keep the state land, don't sell it.

We like to see wild country. Great country; that's how we look at the land.

We want to be able to live in the Indian way in 100 years. Don't destroy the land so that we can't do that.

We keep land and don't destroy or change it.

Tok **12 persons attended the meeting**

Quit offering disposals in outlying areas. Concentrate disposals in the immediate area.

Disposals create conflicts with fishing, hunting and trapping.

Disposals are barely accessible. They should be kept for public use.

Property values are destroyed by excessive land for sale by the state. Disposals have gone way over the need for land.

Parcel sizes are too small (5 acres). Sell people more and this would minimize the need to to to Tok for work. It would minimize competition for jobs.

Local residents have no way to plan. They can't be assured a parcel due to the lottery system. Land gets in the hands of people who don't use it; in the hands of speculators.. People that want to do something with the land can't get it.

Don't sell people a dream that isn't real. Remotes where people can hunt and fish and build a little cabin don't exist. This is not a way to get a job/make a living. The fish and game in the area can't support this lifestyle.

Dispose of bigger pieces that people can make a living off of. The smaller pieces aren't doing anyone any good. Need 40 acre farm pieces.

Sell inexpensive parcels that people can live on.

Get better compliance and enforcement to insure people are meeting requirements that are outlined by the state for people when they buy the land.

Who checks up on compliance and whether residents meet requirements?

State requirements for buying land so it leaves no question as to what is required for compliance.

Money should not be the only common denominator and basis for making disposal decisions.

In considering disposals consider the long term values of keeping that land in a renewable resource use, like forestry, or fish and wildlife.

Give people three years or another period of time to develop their land. This way land will be put in the hands of those that want to do something with it. Speculators would be reduced and demand also.

There is a built-in problem with remotes; fire protection. Consolidate disposals and keep them close to Tok so the state doesn't have to pay huge amounts of money just to protect a few people's property.

Cathedral Bluffs - no one is in the area and **DON'T** reopen it. Don't do a lot of disposals in this region.

Dispose of land from the center of the community outward.

Include easements in disposals and write them into the land disposals.

Where is everyone who buys this land going to work? 5 acre disposals are useless. You can't live on them.

Place disposals in an area with an economic base that can support more people.

There are plenty of disposals at present to meet the future expansion of Tok.

A lot of the land the state has for sale is under a bunch of water or is straight up.

Easements and access to personal property across state lands should be provided for.

Give a lease to purchase land with stated development conditions, not at these high inflated prices. Now! for Alaskans, not these fly-by-night rotating residences.

Fairbanks - General **23 persons attended the meeting**

People are demanding land--cheap land. There is lots of land for sale but it is not cheap. The state is creating its own momentum with a flood of cheap land. It's a myth that the state is perpetuating. The state should stop creating its own demand.

Speculators should be stopped from getting land. It should be sold to those who need the land.

Disposals have encouraged speculation. I bet 95% of people that buy have land and don't use it. People should have to use their land.

I'm not against disposals, but the state should make the prices less prohivitive for the unwealthy.

Private ownership should be at bottom of priorities. Pick other public uses first - sell what is left.

The problem is that disposals are starting to conflict with public interest lands. Disposals should stay out of public interest lands.

The problem is that both public interest lands and good disposal land are at the same place.

Identify public interest lands first - then what's left give to disposals.

Put less weight on remote disposals. People want land more for public uses such as recreational/hunting/ fishing, not to have it sold.

Include provision in the sale of state land requiring people to use the land.

I have real trouble with the state telling people what to do. What business is it of the state's what people do with their land?

I agree - don't put restrictions on use of land bought from the state.

It's not fair to my children to require people to use the land now. I want some land for my children. Prime sites come up now but in 20 years won't be available to my children. I should be allowed to get land now and hang onto it for my children.

If the state opens an area - they should provide a road to it. If they can't put a road into it they shouldn't sell it.

Small tracts should be placed along existing roads. Do it so there isn't a heavy concentration of people in one spot. Spread people out.

Center disposals around the road system where there is access.

Don't lock land up by disposing it.

Alaska Trappers agree. Land lock up is by disposals.

The disposal program to date has been really helter skelter.

People are taking it in the rear end with disposals. It's just not a very good program.

Disposals create head-on conflicts with recreation.

State shouldn't try to make money on land. It's our land to start out with.

Lands that are classified should have more weight than is presently given classifications. For example, forest classified areas. I've seen the state just go in and dispose of these with no problem. The state shouldn't be able to just go in and sell. Give classifications weight to they can't be changed at someone's whim.

Where there is a trapping cabin or any kind of structure no agricultural or mining disposal should be allowed within a reasonable distance of these structures.

Get more public review for disposals.

Provide land for the people for year-round use.

Those days are gone when you could get your remote place on a river nearby to a population center. We just have to get used to this. There are some people that have a good thing - have whole area to themselves, and are going to keep it that way. But that's where the problem is. I have one, or want one, but don't want you next to me.

When disposals get too many people in one spot it's not good. It ruins why the people came and tried to get remote disposal. They didn't come to live right next to someone.

If the state is going to sell remotes then it should insure that the buyer gets what he buys, a remote parcel. It's the state's responsibility to do this. The state should include buffers with most of these remote disposals.

Don't offer any remote disposals.

A good acreage and density for remote disposals would be 5 acres every square mile.

Areas adjacent to private recreational sites should have a buffer system between them and other uses. Stronger language should be put in the sale of private recreational sales to make sure it is just seasonal use. I have some land and there are private year-round users on lots next to mine.

There is a linkage between settlement, recreation and habitat. Settlement increases the value of the latter two.

The owners of the land tend to block public access.

Disposals inevitably lead to conflicts; pressure on resources; erosion of character of area and they might require fire services as well as public services. Large blocks of public land are too few and too important to be disposed of.

We are opposed to disposals unless within three miles of existing roads or near communities - don't create new communities.

If you dispose of an area, you eliminate the options for future. We see no pressing need for disposals.

I think the state should identify new sites for urban development but these should be located near potential developments. These might be prioritized for development. You will need access between these. Make

sure the access routes are coordinated with bordering region. You must do rural, industrial and social planning in addition to land planning.

With the disposal program in the past, there has been too much land sold, with too little planning - no water , etc. Too much emphasis on quantity and not quality. Much more emphasis is needed in finding quality land.

A public survey should determine local demand for land.

A local socio-economic assessment is necessary for disposals in outlying areas.

Citizen committees could be used to make disposals responsive to local needs. The state should establish "Settlement Advisory Boards".

What percentage of land offered has actually been settled? This would indicate where they are most successful and how serious people are about using the land they obtained.

Settlement - the key question we should be asking about settlement is whether it is in the long term public interest, not whether or not there is a demand for land. I question our right to make irrevocable decisions. Land disposals are not compatible with forestry or fish and game - this should be addressed in the plan's alternatives.

Trappers see land disposals as greatest threat to wildlands and traditional uses. We are especially concerned about inappropriate disposals in very important habitat areas.

Put remotes where they have access; where they don't require new access routes.

Leave access trails in area for public use.

Lease state land for cabin sites.

No high use recreation land should be sold without a public hearing.

People want access to disposals.

Keep disposals close to the roads.

Remote disposals should be 2 acres or less.

Remote ownership ties up land - keeps other uses out.

I'm against remotes four or so miles from a road. It destroys habitat.

Don't offer subdivisions in remote areas.

Land can't support people in remote areas.

Remotes should be dispersed.

I'm against the quotas that tell the state how much land to sell.

Keep remotes along river, lake or road - were there is access.

Poor land is offered for remotes.

The public wants to own land.

Offer some areas for lease and some for sale.

Don't put state money into changing Alaska from what it is. Keep Alaska the same.

I don't like roads. It really changes things when a road is put in. How much access can an area stand?

Reasons for living in the Tanana Basin Area are space and freedom that is close to home - at the door. We want it to stay that way with buffer zones around town.

Plan should identify sites for new communities and should take a broad view of planning which would include such issues as transportation and energy development.

Want as much land in multiple use as possible.

Deal with what benefits most people, not a limited few.

Don't compare land use values on an economic basis only.

Fairbanks - Disposals **17 persons attended the meeting**

I'm a pro-agriculture person and some problems are that the disposals are land that has a better use - such as timber - and they're not using the best dry muskeg which is good agricultural land. This land wouldn't even have to be cleared. Out best fields are drained wetlands but these are classed as Class IV and V. The method of selecting agricultural land is therefore poor. We're using good timber and fish and game land for agriculture and wasting the other.

I'm for agriculture, but I'm not in favor or disposing of good timber land.

In the Fairbanks area, cleared black spruce muskeg is some of the finest farmland around. We should look carefully at this rather than taking good timber land.

We don't need the old classification now that we know how good the muskeg can be. Save the timber on good forest land.

I have class IV soil and it is not muck but I couldn't get credit for clearing it. Instead they made me cut down the trees on the rest of the land. Let's not go rigidly by the soils information which is still very rough for the area. Goldstream soils are good when drained.

Class IV and V are equally or more productive than class II and III.

Since this is state not federal land, we should classify it by what is most appropriate up here. We must adapt to the arctic. Take a look at these uses and how they would go best in the Tanana Valley.

All of those uses listed (forestry, fish and game, etc.) are important.

What may be good subdivisions elsewhere, wouldn't be here and the other way around.

Subdivisions should be near the city, not away from the road.

We do need more lands for disposals. We have a great shortage of land in the area.

Subdivisions should be in close so the development and services to them are reasonable.

A remote subdivision is a contradiction in terms. Subdivisions should be near work.

Remote parcels are a farce. A way to get rid of land without ever going to live there. Like Cathedral Bluffs with no timber, road or anything. Develop land in close.

What you're going to have is welfare communities in the bush - created by disposals.

Land within the highway system should be used first.

Stay with forest if it's good forest near the road. This would also provide good fish and game habitat.

Stay with forest near the road.

A little subdivision won't interfere with large forests too badly.

There's nothing that says a forest has to be sold or that a farm can't have wildland included.

I'd like to see it divided section by section to see what each is good for.

I was appalled when I saw all the wood piled up at Delta - not being used.

The state has such a short removal time, there's no chance to salvage the wood.

As far as multiple use, recreation should be at the bottom of the list. No one has time for that.

I'm not opposed to recreation. We're going to have trespass problems if we don't watch it.

Recreation is a major contributor to the economy. But we don't want parks, just areas that are open to recreation.

In remote areas, we should have fewer remote parcels and more remote leases, so that we don't have a patchwork of suburbs there in the future. We don't have to sell these.

Remotes are just being used for speculation right now.

Remotes also disrupt fish and game habitat.

I'd like to see you go with bigger lots.

I'd like to see some small lots near town.

Rembember for sewage and wells we need low density lots.

It's unfair that the Interior has to meet one-half the quota for disposals.

There are many people in the state who feel that 100,000 acres is too much. That's why the repealed the law. Now they say they're going to ignore the law.

The prices are extremely high in some areas.

Within a 1/4 acre of the road, you could put a lot of people between here and Nenana. This would be within access of Fairbanks. You don't need big lots down there.

They're holding back land that is good for people to live on. We ought to take a look at (public interest lands) to see if they're worth it.

Tell people that there will be logging trucks and they won't object. Put the public lands back away from the road.

Keep lakes and rivers for public use.

Mining areas would only compete with subdivisions.

Leave mining areas in multiple use categories.

Let the miners and farmers, foresters, trappers and hunters nominate land for disposal.

Let private enterprise decide what should be disposed of.

All the people with money would end up getting all the land if people nominated the land.

First, determine what type of forest you have. Quit classifying large areas just as forestry or whatever. Have more than one use.

Let's get DGGS out there to survey the land for mineral potential - let's find out if the minerals are there or not.

Let's get some fee simple ground out on the market for homesteading. Let's get some sweat equity. Let's not use today's standards for clearing land, let's look at the needs of the future for firewood and sawtimber.

The disposal program ought to be made on the basis of real personal need, not just wants or desires.

You can't separate them - if I want just 10 acres and someone else wants a second 40 acres, you can't tell the difference.

I'm not opposed to trapping, but trappers use 30,000 acres and call it public use and someone else buys land and you say that isn't the same.

You can use trapping areas for other uses; you can't use disposals for other things.

You can have remote traplines settled on both sides and not have a conflict.

By leaving land in public use you don't give a fellow a chance to do his thing. Just trappers and hunters can use these areas if you don't dispose of them.

It's a concensus of the people I talk to that 100,000 acres is too much.

The difference between "demand" and "need" bothers me. Demand is what the people want. Need is what the bureaucrats decide people need. Go on demand and not need - both by quantity and location. Forget quota, just sell land near towns.

We put in for lotteries so many times and failed. We couldn't afford to do it again so we had to buy privately. Put out enough land near roads - everyone in the state wants land - I paid $3,000 for swamp.

DNR disposed of such poor land that people gave up on state disposals. Go after the Borough so that we don't have to go to remote areas.

For most of the land, all you get is a right to farm - nothing else. We're going to be able to clear as much land as Division of Agriculture says. You can't sell the livestock you raise. Fee simple title would change a lot. The restrictions on individual use are too great. They'll put everyone's lawn in production to meet ~~the~~ 500,000 acre figure.

Look at how many people are applying for lots and you'll get an idea of the demand. There's nowhere enough land to meet the demand.

Sometimes I feel I was born 100 years too late. Trappers and miners opened up this country and now we have to take a back seat. Documented sales of furs are extremely important - 40 lynx coats from the Tanana Basin were worth $7 million in 1980. We are on the verge of establishing a trapping industry in the Basin, but we've got to have the area to trap in. We can coexist with forestry, recreation, mining, etc. We can't coexist with private ownership in remote areas. We can coexist with private land near the highways. Disposals must be where people have access to the land. Forest lands in remote areas must be preserved. In the Tanana Basin Area the value of fur is $776,000 and another $300,000 worth are manufactured into hats and coats.

I agree that trappers and miners opened the land, but the times have changed. Now my land is worth more than the trappers produce.

I am in favor of trapping and hunting and timber harvesting. But the people who protested Delta II on the grounds that it was good habitat didn't know anything about the area. You support me and I'll support you.

I'm not against agriculture or disposals but I'd like to see them near roads.

There's enough land for us to exist together. We've got to work together.

We're not thinking of future growth. Since 1960, the population of Alaska has doubled and it will double again by 2000 and we will need the land for agriculture.

But the government is paying people in the lower 48 not to plant.

Our arctic environment is different. In Fairbanks we have virtually reached the limit as far as pollution goes. We either stop the growth or take health hazards. We've got to get land so people can move out. Firewood in the past few years has increased the pollution. We'll have to spread the people out a bit; but not too far to cause pollution from driving.

Firewood isn't a problem. It's automobile exhaust and planes.

Firewood burning will become a problem.

When you dispose of land you must ensure access for others - section lines and traditional trails.

Leave parks out of the Basin.

Don't close the door on remote leases. Balance a guy's use with the best use of that land.

Somebody said "no parks". Out by Two River's School people are begging for a ski trail. I'd love to see this a possibility for this area.

Chapter 3

Demand for the Resource

DEMAND FOR SETTLEMENT LAND

I. INTRODUCTION

This chapter is organized in two parts. Part 1 estimates the total demand for land, including both investment demand and demand for land to build on. Part 2 estimates the amount of land which may actually be used.

Part 1 of this chapter was prepared by the Land Resource Planning Section in Anchorage as part of the annual statewide disposal demand assessment in January of 1983. It includes an evaluation of existing demand and projects demand by quality type and by disposal program, assuming 1982 disposals are typical. This is probably not true since the varying quality of land offered, consumer preferences, the recent end of the discount program, the introduction of the homesteading program and many other factors may cause significant changes.

Although the end of the discount program may be the most significant change from the 1982 program (which the projections are based on), sales still remain brisk in the Northcentral District. This is attributed to the current high quality of the land for sale. Apparently consumers still consider the land a good buy even at market prices (Chris Guinn, Disposal Section, NCDO, personal communication, August, 1983). Whether or not this will continue is uncertain. Sales at the Southcentral District in Anchorage are down about 30% since the discount program ended (Chris Beck, Susitna Basin Area Plan, SCDO, August, 1983). Given these mixed signals, it is difficult to anticipate the effect of the end of the discount program. These limitations must be kept in mind when reviewing Part 1 of this chapter.

Part 2 projects the amount of land that will actually be used based on surveys of land use in the Susitna Area. This approach also has limitations because it assumes that people in the Susitna area have "needs" similar to those of people in the Tanana Basin. This assumption is tentative, but because there is no similar survey for the Tanana Basin, the results are the best available and should provide an order-of-magnitude estimate.

PART 1. TOTAL DEMAND FOR PRIVATE LAND IN THE TANANA BASIN

The demand for settlement land depends on a number of factors, including price, quality, location and the buyer's perception of future prices. No detailed economic study of the current demand for land is available. However, a projection of what the future response to sales would be, based on past sales, was prepared by DNR early in 1983 (DNR, 1983).

This study projected the demand for private land in the Basin based on past state sales. As mentioned above, several aspects of the state disposal program have changed since this study was conducted. In addition, the Tanana-Yukon region for which this information was compiled does not correspond exactly to the Tanana Basin. For these reasons, conclusions of the study are presented here only as an order-of-magnitude estimate.

As shown below in Table 3-1, the total demand for private land in the Basin was forecast to be about 194,000 gross acres over the next five years. Of this amount, 56% is likely to be demand for Quality Type A subdivisions. The net acreage needed is roughly one-quarter of the gross.

TABLE 3-1
SETTLEMENT
GROSS ACREAGE DEMANDED FY'84-88

	Type A	Type B	Type C	Type D	Type E	Total
FY'84	20,334	2,294	5,018	2,431	6,168	36,245
FY'85 & '86	43,871	4,943	10,335	5,014	12,700	7,863
FY'87 & '88	45,373	5,113	11,205	5,340	13,764	80,885
TOTAL	**109,578**	**12,350**	**26,558**	**12,875**	**32,632**	**193,993**

The net acreage, or the acreage actually sold, will be approximately one-quarter of the gross.

PART 2: PROJECTED SETTLEMENT LAND

INTRODUCTION

This is an attempt to determine the amount of land that will be actually used by the purchaser. This does not include land that is held for speculation or other reasons.

No in depth study has been done to determine the amount of state land sold that is actually built on. In this analysis, we rely primarily on figures for the Mat-Su Borough and discussions with Division of Land and Water Management staff in Fairbanks. Rather than set forth one set of assumptions on land settlement requirements, we are providing a range. This range gives an order of magnitude estimate of projected settlement requirements.

I. Definition of Settlement Types

Settlement use has been divided into 5 categories. These "use" categories are based on existing land disposal programs and are defined below.

1. Residential subdivision - Year-round residential use, generally associated with expansion of existing communities and other presently road accessed, developed areas.

2. Recreational residential - Seasonal or recreational settlement including those dwelling units that are not primary residences. Recreational settlement occurs in both accessed and remote portions of the Basin.

3. Remote residential - Year round residential settlement where the residents earn the majority of their living directly off the land through hunting, fishing, trapping, farming and food gathering and construct their residences largely from local materials.

These categories correspond to the major types of settlement use demanded of public lands. The categories and the areas in which they occur are not entirely mutually exclusive.

II. Population Projections

Table 3-2 presents population projections for communities within the Basin and for the Tanana Basin as a whole. The population forecasts were taken from the Tanana Basin Area Plan Socioeconomic paper (DNR, DRD, 1982).

TABLE 3-2

SUMMARY OF POPULATION FORECASTS — TANANA BASIN

COMMUNITY	1980 Census	YEAR 1985	1990	1995	2000
Anderson	22,517	599	694	766	846
Cantwell	95	116	142	165	187
Delta Junction/Ft Greely/Delta	2,860	2,239	3,666	4,074	4,422
Delta Junction/Delta	1,224	1,562	1,947	2,312	2,616
Dot Lake	66	78	90	102	113
Fairbanks North Star Borough	53,983	66,500	74,400	82,700	91,400
Healy	398	518	693	594	1,351
Lake Minchumina	22	35	56	82	105
Livengood	14	21	26	32	36
Manley Hot Springs	82	120	149	185	204
Mentasta Lake	59	60	62	64	65
Minto	152	156	160	164	168
Nabesna/Northway	186	221	256	290	320
Nenana	470	600	748	888	1,004
Tetlin	107	110	114	120	126
Tanacross	117	134	152	154	170
Tanana	388	389	408	418	429
Tok	585	880	1,150	1,503	1,742
Totals	61,325	75,347	84,913	94,613	105,304

Sources: Louis Berger and Assoc., and Department of Natural Resources, Division of Reserch and Development.

III. Projection by Settlement Use Type

This section presents projections of land requirements to accommodate the forecast population growth over 20 years for each of the settlement use categories outlined in Section I.

A. Residential Subdivisions

This category of settlement includes land that will be needed to accommodate permanent residences. In order to calculate the quantity of land required, certain preliminary assumptions were made.

1. The average number of acres used per household is between one and four acres.

2. The average number of persons per household 3.3 (average for communities in the Tanana Basin from U.S. Department of Commerce 1980 census.)

3. From the above assumptions, the average number of acres used per person is .3 to 1.21 acres.

Table 3-3 summarizes this information at five year increments for the next twenty years. By the year 2000 it is estimated that between 13,000 and 53,000 acres of residential subdivision land will be needed.

B. Recreational Settlement

This category of settlement is land that will be needed to accommodate the recreational and seasonal "second homes" of basin residents.

The assumptions used were as follows:

1. One to five percent of the population uses a recreational site.

2. The average size of these recreational sites is 10 acres.

3. The average amount of land used per person in the basin is therefore between .1 and .5 acres.

Table 3-4 summarizes this information at five year increments for the next twenty years. By the year 2000 it is estimated that between 4,400 and 22,000 acres of recreational land will be needed.

C. Remote Settlement Land

This category of settlement is land that will be needed to accommodate residents who wish to live a remote self sufficient lifestyle.

The estimates and assumptions used are:

1. 0.01 percent of the population uses a remote site.

2. The average number of acres per household for remote settlement use is 40 acres.

3. The average amount of land used per person in the Basin is therefore 0.04 acres.

Table 3-5 summarizes this information at five year increments for the next twenty years. By the year 2000 it is estimated that an additional 1,800 acres of remote settlement land will be needed.

D. Small Agriculture/Agriculture Homesteads

This category of settlement is land that will be needed to accommodate those people who are seriously interested in farming, but are not able to purchase a large scale barley farm.

The estimates and assumptions are:

1. A total of 2,990 people in the Tanana Basin are interested in purchasing small agriculture parcels. (230 parcels have been offered in the Basin. On the average there are 13 applicants per parcel -- Chapter 3 of the Settlement Element. 13 x 230 = 2,990).

2. Of these 2,990 people between 50% and 95% or between 1,495 to 2,894 people would actually purchase a parcel if they won the lottery and would develop it for agricultural use. This is between 2% and 5% of the Basin population.

3. The average acreage which would satisfy people who are serious about small scale farming is between 40 and 160 acres.

Table 3-6 summarizes this information at 5 year increments for the next 20 years. By the year 2000 it is estimated that between 88,216 and 738,968 acres for agricultural homesteading or small scale agriculture would actually be developed if offered for sale.

TABLE 3-3
RESIDENTIAL SETTLEMENT USE

Year	Population	New Population	Average Acres per Person Needed[2]	Range of Acres/Year Likely to be Used
Curr	61,325	-	0.3 to 1.21	18,398 to 74,203[1]
1985	75,347	14,022	" " "	4,207 to 16,966
1990	84,913	9,566	" " "	2,870 to 11,574
1995	94,613	9,700	" " "	2,910 to 11,737
2000	105,304	10,691	" " "	3,207 to 12,936
Total	-	43,979		13,194 to 53,214

[1] It is assumed that about 74,000 acres are currently being used for residential purposes.

[2] See text for assumptions.

TABLE 3-4
RECREATIONAL SETTLEMENT USE

Year	Population	New Population	Average Acres per Person Needed[2]	Range of Acres/Year Likely to be Used
Curr	61,325	-	0.1 to 0.5	6,133 to 30,662[1]
1985	75,347	14,022	" " "	1,402 to 7,011
1990	84,913	9,566	" " "	957 to 4,783
1995	94,613	9,700	" " "	970 to 4,850
2000	105,304	10,691	" " "	1,009 to 5,345
Total	-	43,979	-	4,398 to 21,989

[1] It is assumed that about 30,000 acres are currently being used for recreational homes.

[2] See text for assumptions.

TABLE 3-5
REMOTE SELF SUFFICIENT SETTLEMENT USE

Year	Population	New Population	Average Acres per Person Needed[1]	Acres/Year Likely to be Used
Curr	61,325	-	.04	2,453[2]
1985	75,347	14,022	.04	561
1990	84,913	9,566	.04	383
1995	94,613	9,700	.04	388
2000	105,304	10,691	.04	428
Total	-	43,979	-	1,760

[1] See text for assumptions.

TABLE 3-6
SMALL AGRICULTURE/AGRICULTURE HOMESTEAD USE

Year	Population	A New Population	B New Population Needing Ag Land [A x .02 to .05][1]	C Range of Acres/Year Likely to be Used [B x 40 to 160][2]
Curr	61,325	-	1,495 to 2,840	59,800 to 454,400
1985	75,347	14,022	112 to 280	4,480 to 44,880
1990	84,913	9,566	191 to 478	7,656 to 76,560
1995	94,613	9,700	194 to 485	7,760 to 77,600
2000	105,304	10,691	213 to 534	8,520 to 85,528
Total	-	43,979		88,216 to 738,968

[1] See text for assumptions.

[2] See text for assumptions.

Chapter 4

Supply of the Resource

PART 1. PHYSICAL CAPABILITY

This part of Chapter 4 discusses the criteria used to produce the maps of physical capability.

I. Criteria used to produce the maps of physical capability

The map of physical capability for settlement combined information from a vegetation map of the Tanana Basin and a series of slope maps. Capability was also determined by a map of soil limitations, based on soils maps of the Basin. Each of the three sets of maps, vegetation, slopes and soils was produced by Ray Kreig and Associates under contract to Division of Geological and Geophysical Survey in the fall of 1982.

A. Vegetation

The vegetation map integrates all existing information and is the best information available to date on the vegetation of the Tanana Basin. The different sources used to produce this vegetation map are as follows:

- Viereck, L.A., Dyrness, C.T., and Batten, A.R., 1982, Preliminary Classification System for Vegetation in Alaska, 64 p.
- Vegetation maps and reports.
- U.S.G.S. 1:250,000 topographic quadrangle.
- LANDSAT imagery.
- Aerial photography.

For a detailed discussion of the method used to integrate this information, refer to Appendix 4A and to the Susitna River Basin Automated Geographic Information System; Land Capability and Suitability Analysis, published by Environmental Systems Research Institute in 1981. This document explains how maps were developed for the Susitna River Basin. The process used to produce the vegetation map for the Tanana Basin was the same.

The basic vegetation map identifies coniferous, deciduous, mixed forests and scrub vegetation. Each of these categories is subdivided to indicate whether the trees are tall, intermedite or dwarf, and whether the vegetation makes a closed or open canopy cover. Also included in the map are areas that are primarily one type of vegetation (50-75%) but also have 25 to 49% of the area covered with a secondary type of vegetation.

Before the vegetation map is of use in the planning process, the various vegetation types contained in the map legend must be categorized as to their value for settlement. This was done by the Division of Land and Water Management.

The rankings of primary and primary-plus-secondary vegetation types are shown in Tables 4-1.

B. Slopes

The slope maps established categories from 0-5%, 5-10%, 10-15%, 15-30%, 30-50%, 50-75% and over 75%. For settlement capability these categories were combined to create an overlay differentiating areas of greater than 30% slopes from areas of less than 30% slope. The two maps, vegetation and slope, were then combined to create another overlay ranking land from very high to low for settlement capability. Slopes greater than 30% lowered the capability rating of land as shown in Table 4-2.

Settlement Rating	Slopes <30%	Slopes >30%
very high	very high	high
high	high	high
medium	medium	low
low	low	----

C. Soils

The soils map produced by Ray Kreig and Associates is the best information available to date on the soils in the Basin. The different sources of information used to produce the soils map are as follows:

1. Reiger S., Schoephorster, D.B. and Furbish C.E., 1979, Exploratory Soil Sureyy of Alaska. US Department of Agriculture. 213 pp. Scale 1: 1,000,000.

2. Soil surveys and reports.

3. Soil Conservation Service, 1975; Soil Taxonomy; US Department of Agriculture, no. 436, 754 pp.

4. U.S.G.S., 1: 250,000 topographic quadrangles.

5. Aerial photography

The process used to integrate this information was the same as that described for the vegetation map (see Appendix 4A).

TABLE 4-1
CRITERIA FOR DISPOSALS WHEN BOTH PRIMARY AND SECONDARY VEGETATION ARE PRESENT

H = High Value
M = Medium
L = Low

Primary Vegetation Type (50-75% of Polygon)	Map Symbol	Secondary Vegetation Types (25-49% of Polygon): Coniferous, Tall (CT)	Coniferous, Intermediate or Regrowth (CI or CR)	Coniferous, Dwarf (CD)	Deciduous, Tall (DT)	Deciduous, Intermediate or Regrowth (DI or DR)	Deciduous, Dwarf (DD)	Mixed, Tall (MT)	Mixed, Intermediate or Regrowth (MI or MR)	Mixed, Dwarf (MD)	Scrub (S)
Tall Coniferous	CT	H	H	M	H	H	M	H	H	M	H
Conifer, Intermediate or Regrowth	CI or CR	H	M	M	H	M	M	H	M	M	M
Dwarf Conifer	CD	L	L	P	L	L	P	L	L	P	P
Tall Deciduous	DT	H	H	M	H	H	M	H	H	M	H
Deciduous, Intermediate or Regrowth	DI or DR	H	M	L	H	M	L	H	M	L	M
Deciduous, Dwarf	DD	L	L	P	L	L	L	L	L	L	L
Mixed Forest, Tall	MT	H	H	M	H	H	M	H	H	M	H
Mixed Forest, Intermediate or Regrowth	MI or MR	H	M	L	H	M	L	H	M	L	M
Mixed Dwarf	MD	L	L	P	L	L	L	L	L	L	L
Scrub	S	M	L	P	M	L	P	M	L	P	P

Two maps showing soil limitations for disposal location were made from the basic soils maps. Soils judged to have very severe limitations for settlement were blacked out on an overlay map. Soils in this category include the following calssifications:

Hyp - Pergelic cryofibrists
Hmp - Pergelic cryohemists
Lp - Lemeta
Mn - Minto
Sol-g - Lithic cryorthods
Su - Saulich

These classifications were determined by Chris Guinn, DLWM, Department of Natural Resources, based on his knowledge of the soil types and experience with prior disposals. These classifications differ from the soils ranked "very severe" by the Soil Conservation Service, which included additional soil caterories in the ranking. A full listing of the soils ranked "very severe" by the Soil Conservation Service, along with Mr. Guinn's rationale for their exclusion in this case can be found in Appendix 4B.

The second map of soil limitations is a refinement of the "very severe" soils category. Soils included in the first overlay show soils with "very severe" limitations for residential disposals. The second map is a subset of the first, showing those soils with limitations for even remote and subsistence settlement. The following classifications are included:

Hyp - Pergelic cryofibrists
Hmp - Pergelic cryohemists
Lp - Lemeta
Su - Saulich

The two soils overlays, together with the composite ranking of vegetation and slope were used to determine physical capability of land within the Basin for settlement.

PART 2. SUITABILITY

This portion of Chapter 4 is divided into two sections: (1) the criteria used to determine suitability and (2) a discussion of the acreage and estimated supply of the resource in the Basin.

I. Methods Used to Determine Suitability

Two criteria in addition to physical capability were used to determine the suitability of an area for settlement: ownership and accessibility.

A. Accessibility

Five categories of accessibility were used. They range from most accessible to least and are defined as follows:

Category	Definition
A	Land within 40 miles of Fairbanks or 25 miles of another community and also within 2 miles of an existing road, existing railway or a proposed road where no bridge will be required.
B	Land greater than 40 miles distant from Fairbanks or 25 miles from another community but less than 2 miles from an existing road or railway or a proposed road.
C	Land within 300 feet of a lake, floatable river or airstrip and greater than 2 miles from a road or railway
D	Land between 300 feet and 1/4 mile from a lake, floatable river or airstrip and greater than 2 miles from a road or railway.
E	Land that does not meet any of the above criteria.

B. Ownership

The second criteria of suitability is ownership. Only acres owned or selected by the state are included in the acreage summaries of resource supply.

II. Supply

The results of the capability and suitability analyses are shown in Table 4-2. This represents the total supply of state land in the Basin that is both capable and suitable for settlement.

Maps of the capability information and of the suitability areas are available at the Department of Natural Resources, Division of Land and Water Management, Fairbanks, Alaska.

TABLE 4-2

Estimated Amount of State Owned or Selected Land Capable of Supporting Settlement in the Tanana Basin (in acres)

Disposal Quality Class					Total
A	B	C	D	E	
291,800	110,500	11,100	22,400	1,912,400	2,348,200

APPENDIX 4A

Mapping Procedure: Vegetation was mapped by stereoscopic photointerpretation of 1:60,000 CIR photography. Black and white units were reformatted and delineated on a mylar overlay fixed atop the LANDSAT scene. Site specific projects and the sample plots were used where available in identifying characteristic signatures. The final vegetation overlay were rectified and registered to the U.S.G.S. basemap. Waterbodies and urban or disturbed areas were mapped to smaller resolution consistent with the land use variable.

The classification was a modified version of L.A. Viereck et al. "Preliminary Classification System for Vegetation of Alaska". Vegetation was generally mapped to level three of the Viereck system. Black spruce was mapped where possible. Vegetation complexes will be created for areas where two vegetation groups were mixed and where mapping resolution prohibited the delineation of separate vegetative units. Mapping resolution was approximately 640 acres.

Any vegetation type which occupied greater than 60% of the relative groundcover for an area with a homogeneous photo-signature was mapped as a single type with no secondary type identified. Under all other circumstances where two vegetation types occur in more equal proportions, the primary vegetation type was determined on the basis of stature and absolute crown cover, or according to relative crown cover when life forms of similar stature shared an area. Thus, in a given area, the primary vegetation was the tallest life form with at least 25% absolute crown coverage (25% of maximum crown diameter coverage). In a situation with life forms of similar stature sharing an area, the primary vegetation was the life form which had the greatest relative crown coverage (the percentage of the absolute crown coverage).

The secondary vegetation type was determined on the basis of relative crown coverage. Whichever life form had the next highest relative crown coverage was designated as the secondary vegetation type.

Barren or Urban/Disturbed categories were ranked by the total percent of the area which they occupied.

Definitions:

1. Tall, intermediate and dwarf refer to the height of the vegetation found in that area. The terms are defined as follows:

Tall:	Greater than 10 meters in height
Intermediate:	3-10 meters in height
Dwarf:	Used only for spruce less than 3 meters in height

2. Closed, open and woodland refer to the canopy cover of the vegetation type. The terms are defined as follows:

Closed:	60-100% canopy cover
Open:	25-60% canopy cover
Woodland:	10-25% canopy cover

APPENDIX 4-B

Soils With Very Severe Limitations For Low Buildings (Regardless of Slope) (Soil Conservation Service Categories)

Map Sym	Soil Type	Reasons for Very Severe Ranking
Ea	Easley	Permafrost; high potential for frost action.
Es	Ester	Permafrost; steep slopes.
Gt	Goldstream	High water table; permafrost common.
Hyp	Pergelic cryofibrists	Permafrost common; low stability due to humus, peat buildup.
IQph-m	Histic Pergelic Cryaquepts	Wetness; Permafrost common.
IQp-m	Pergelic Cryaquepts	Wetness; Permafrost
Kl	Kuslina	Permafrost at shallow depth; settles unevenly when thawed.
Lp	Lemeta	Peat buildup; permafrost common; high water table.
Mn	Minto	Thermokarst pitting possible; susceptibility to frost action; susceptibility to erosion.
Sol-g	Lithic Cryorthods	Steepness of slope
Su	Saulich	High water table; permafrost common.

Rationale For Exclusion of Certain Soils From the "Very Severe" Category

The following soils were removed from the "very severe" category for the reasons stated.

IQph-m	Histic Pergelic Cryaquepts
Gt	Goldstream
Es	Ester
Ea	Easley
Kl	Kuslina

The soils limitation for the above soils is the common presence of wetness and permafrost. The Goldstream and Ester soil series can be found among these soils. The Goldstream and Ester soils are commonly used for conventional residential sites in the Fairbanks area. The Goldstream series can support a very dense development (i.e. 8,000 sq ft lots) by allowing the permafrost to thaw and constructing community water and sewer, e.g. University West. The Ester soils tend towards steeper north facing slopes with shallow soil over bedrock. Secondary waste disposal systems are commonly designed around these characteristics in the Fairbanks area. Accordingly the Easley series is described as similiar to the Histic Pergelic Cryaquepts soil only more acidic and the Kuslina series is described as similiar to the Histic Pergelic Cryaquepts soil only less acidic.

IQp-m Pergelic Cryaquepts

The soil limitation is wetness and permafrost. The soil survey indicates this series is better than the Histic Pergelic Cryaquepts and likens it to the Tanana Soil series which is commonly used to support residential construction in the Fairbanks area. In some cases, where the vegetation has been stripped and the permafrost has been allowed to thaw for one or two seasons, the Tanana series can support dense development, e.g. University West Subdivision.

Chapter 5

Benefit Cost Analysis

INTRODUCTION

This section presents preliminary results of the analysis of net benefits of the state land disposal program.

For a detailed discussion of the methodology used, see the Forestry Element of the Tanana Basin Area Plan (DNR, 1983).

The net benefits to producers, who in this case are the landowners, are not itemized. This is because it is likely that the net benefits to existing landowners are probably negative in the short-run as state sales lower the average price of land, but positive in the long-run as population growth and land scarcity drive prices up again. It is assumed that the negative impact is likely to be offset by long-run positive effects and therefore no net producer's benefits are anticipated in the long-run.

Income and employment impacts have not been estimated in this study. There are likely to be positive effects, however, due to increases in housing construction, real estate business, and even lodge and charter aircraft business. However, these effects depend on more than just land ownership. For example, interest rates will play the major role in how much construction actually takes place. Also, if a parcel was purchased for speculation, no income and employment effects may take place as a result of the purchase for many years. Finally, construction activity may be a short-term effect of land disposals with few long-term economic benefits.

The fiscal effects of land disposals have been estimated for various scenarios and these are discussed in Section IV of this chapter.

I. Current Benefits to Consumers

The benefits of disposals to consumers are a result of the quantity of land made available at a lower effective price. This is shown graphically in Figure 5-1.

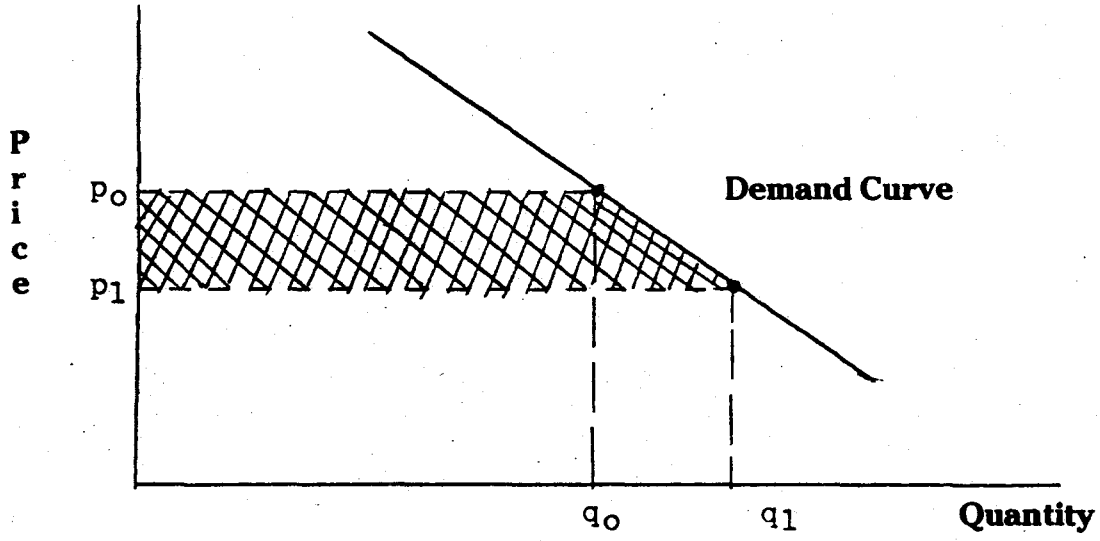


Figure 5-1A Hypothetical Demand for Land

In this graph, private land was the only land available when the market price was at p_o and q_o parcels were sold. When the state entered the market, the market price dropped to p_1 on all land and the quantity available increased to q_1.

Although the state appraises land at the "market price", the state's terms are substantially better than those generally available. Therefore, the effective price on state disposals is lower than the new market price.

Because the price is lower and there is more land available, the consumer surplus has increased by the amount shown in the cross-hatched area in Figure 5-1.

There are several problems, however, in actually calculating this value for the disposal program. First, the demand curve must be estimated. Demand is a function of price, quality of land, population size, income, consumer tastes, etc. However, no estimate of the demand curve is available for land disposals. Secondly, the effective price of state land must be known. This should take the lower down payment and interest rates into account as well as the possible lower search and purchase "costs" to the buyer (since all disposal information is in a single brochure). Because this information is not available, consumer benefits cannot be calculated at this time.

II. Current Net Revenue to the State

The state receives revenues from filing fees and sales of land disposals and incurs costs in the form of administration, travel, equipment, etc. To determine the net benefits, total revenues from sales and fees were estimated, then costs were estimated and the difference represents net benefits to the state. The data presented is for 1982 when the land discount program was used. The revenue to the State will increase now that this program has been eliminated.

Using the mean actual price paid per acre, the average acres per parcel and the number of parcels in each disposal, it was possible to estimate state revenues from the sale of land. The revenues represent the present value of the loan payments to ADNR. Also, the number of subdivision applications was multiplied by the $15 application fee to obtain an estimate of total fees. This information is shown in Table 5-1 for each quality class.

State costs for the 1982 fiscal year on land disposals were estimated based on interviews with Chris Guinn of the Disposal Section, DLWM, and Curt Nelson of DTS. These are shown in Table 5-2. Costs were grouped by "overhead" costs which apply to all programs and surveying costs which are those for the subdivisions analyzed here.

TABLE 5-1
State Revenues from Subdivisions and Remote Parcels
FY'82

	Sale Revenue	Application Fees	Lease Revenue [a]	Total
Subdivisions				
Class A	4,355,506	34,167	n/a	4,389,673
Class B	-0-	-0-		-0-
Class C	457,338	not available		457,338
Class D	354,469	2,511		356,980
Class E	35,122	325		35,447
Remotes				
Class A	186,687	n/a	65,706	252,393
Class B	23,572		11,313	34,885
Class C	222,505		38,640	261,145
Class D	32,385		20,705	53,090
Class E	172,564		65,092	237,656
Total	5,840,148	37,003	201,456	6,078,607

[a] Present value of $10/acre received every year for 10 years discounted at 10%.

TABLE 5-2
Estimated State Costs of Land Disposals
NCDO, FY'82

1. Overhead

Appraisals	55,000
Equipment and Travel	75,000
Salaries, DLWM	546,000
Salaries, DTS	150,000

2. Surveys

Surveys of Subdivisions	1,218,300
TOTAL	**$ 2,044,300**

Table 5-3 shows a summary by Quality Class. For this table, weighted averages of state overhead costs were computed based on the percentage of total acreage disposed of in each class. For example, there were 3,030 acres of Class A subdivisions offered in FY'82. This represents 4 percent of the total of 74,943 acres offered in all programs in the District in FY'82 (see Chapter 3). Therefore, 4% of the total overhead costs were attributed to Class A subdivisions. Overhead costs were about $826,000 in FY'82.

As shown in Table 5-3, the net present value of the revenue to the State from the FY 82 land disposal program is an estimated $4.8 million for the subdivision and remote programs. The programs which did not cover costs include Class E subdivisions, and Class B and D remotes.

TABLE 5-3
SUMMARY OF NET REVENUE FROM DISPOSALS, FY 82

	a	b	c	d	e
		NET BENEFITS TO THE STATE			
DISPOSAL PROGRAM	Acres Offered (acres)	Revenues ($,000)	Est O/H Costs ($,000)	Survey Cost ($,000)	Net Revenue + or Cost – (,000)
					(b)-(c)-(d)
Subdiv					
Class A	3,030	4,390	33	705	4,350
Class B	none soi	--	--	--	--
Class C	202	457	11	57	389
Class D	1,037	357	11	311	(-) 35
Class E	413	35	5	113	(-) 83
Subtotal	4,683	5,239	52	1,186	4,691
Remotes					
Class A	22,483	252	248	n/a	4
Class B	7,729	35	85	n/a	-50
Class C	14,755	261	163	n/a	98
Class D	5,621	53	62	n/a	-9
Class E	19,673	238	217	n/a	21
Subtotal	70,260	839	775	n/a	64
TOTAL	74,943	6,078	827	1,186	4,755,000

III. Fiscal Impacts of Subdivisions and Remote Land Disposals on Local Governments

The fiscal impacts of three types of land disposal were calculated under three scenarios or development patterns. The scenarios concerned the maximum, moderate or minimum fiscal impact for each type of land use. The results and certain key assumptions are presented in Table 5-13.

These scenarios demonstrate a major difference between net fiscal impacts of land disposals, depending on the behavior of the uses and their needs for government infrastructure or services. Clear policy guidelines for future land disposal owners can channel the impact where it can be handled in ways consistent with DNR objectives.

A. Class A Subdivisions

The Class A subdivisions were assumed to be close to town and accessible and located within an organized borough. They were assumed to be 80% residential and 20% recreational in use. A home plus land value of $70,000 was calculated as shown in Appendix 5B. This resulted in annual revenues of $380 per "built" parcel per year in property taxes.

The services assumed for each scenario were composed of roads, schools and other general government services, as required by the landowners. It was assumed that maintenance of 1/8 mile of road per parcel, average school expenditures per student ($880/student in the FNSB), and most other government services would be required for the maximum fiscal impact scenario. Fewer services would be required for a moderate fiscal impact, and if the roads were privately built and no new students involved, then there would be a minimum fiscal impact.

The results show a range from a net cost to the state and the Borough of $1260 per parcel to a $280 gain if no services are required except buses for students who otherwise would live closer to town. The moderate cost impact is estimated at $980 per year.

B. Class B Subdivisions

These subdivisions were assumed to be 50% recreational, 25% self-sufficient and 25% residential in use. A home plus land value of $41,000 was calculated as shown in Appendix 5B. This results in potential revenues to the Borough of $230 per year per parcel in property taxes.

The services assumed for this subdivision are the same as those assumed for Class A subdivisions described above, except that an additional student busing cost is added for the greater distance to school.

The results show a net cost to the state which ranges from a minimum of $20 per parcel per year for no additional services, to $1500 per year for average residential services in the Borough (except public safety). The moderate estimate amounts to a net cost of $1280 per year per parcel built.

C. Remote Parcels

Remote parcels were treated differently from the above subdivisions. Their demands for services were assumed to vary from none to a road or airport plus a school. If a road or airport would be required, the fiscal cost jumps dramatically. The school cost is also significant. If on the other hand, the use is recreational or self-sufficient and no infrastructure is required, the fiscal cost is minimal, and a net gain could be realized, if a mill rate is levied.

TABLE 5-4

Fiscal Impact Scenario Assumptions and Results

Land Type	Maximum Fiscal Cost	Moderate Fiscal Cost	Minimum Fiscal Cost
A. Class A Subdivisions			
1. Value Per Parcel built	70,000	70,000	70,000
2. Mill Rate	5.5	5.5	5.5
3. Property Tax Revenues Per Parcel*	$380	$380	$380
4. Services Assumed	roads, schools 60% general government	roads, schools 20% general government	private road no new students or general government costs
5. Costs Per Parcel/yr*	$1,640	$1,360	$100 (busing)
6. Net Cost per parcel/yr	$1,260	$980	(+280)
B. Class B Subdivisions			
1. Value Per Parcel built	41,000	41,000	41,000
2. Mill Rate	5.5	5.5	5.5
3. Property Tax Revenues Per Parcel*	$230	$230	$230
4. Services Assumed	roads, schools 60% general government	roads, schools 20% general government	private roads, no new students or general government costs
5. Costs Per Parcel*	$1,790	$1,510	$250 (busing)
6. Net Cost per parcel	$1,560	$1,280	$20
C. Remote Parcels			
1. Value Per Parcel built	26,000	26,000	26,000
2. Mill Rate	0 (outside organized borough)	0	5.5 (within borough)
3. Property Tax Revenues Per Parcel*	0 (outside borough)	0	140 (within borough)
4. Services Assumed	10 mile road at airstrip and school built, 20% general government	10% general government	None
5. Costs Per Parcel*	$2,640	$70	--
6. Net Cost per parcel	$2,640	$70	(+140)

* Rounded to Nearest $10

IV. External Benefits and Costs

External benefits and costs have been defined as those effects which are difficult to quantify but nevertheless, very important in making decisions. These effects include social and environmental impacts of land use decisions. A thorough analysis of these effects is beyond the scope of this study, but it is important to highlight some of them. These and other impacts will be examined in more detail during Phase 2 (Alternatives) of this project.

A. Social Effects

On the negative side, these include disruptions of the local lifestyle. Land disposals are opposed by many villages because they are perceived to be a threat to the lifestyle and to the subsistence resources on which that lifestyle depends. In some urban areas, the local people see a possible disruption of the neighborhood as new people with possibly different values move in.

On the positive side, some people are very much in favor of having more private land available in their community. It is possible that there are psychological benefits from owning land, and because many people moved to Alaska with the hope of owning their own "homestead", it is possible that there are many social and psychological benefits of the disposal program.

B. Environmental Effects

The environmental effects of disposals are probably largely negative. This is because many of the disposals are located in relatively pristine areas where any change is likely to have some effects. Erosion due to land clearing, water quality degradation (due to poor septic systems on steep slopes or inappropriate soils), forest fires and overcutting of timber and firewood resources are possible negative environmental effects. Also, wildlife resources can be overharvested and some habitat may be destroyed or migration routes disrupted. Recreational areas can be changed drastically by a disposal.

APPENDIX 5A - CALCULATION OF PRESENT VALUE OF REVENUES FROM DISPOSALS

Subs	Total (1) Value	5% Down	Total Loan Principal	Total Annual (2) Payment	Present Value of (3) Payments	Present Value of Payments Plus Down Payment
A	3,844,728	192,236	3,652,491	488,991	4,163,270	4,355,506
B	403,705	20,185	383,520	51,345	437,153	457,338
C	-	-	-	-	-	-
D	312,900	15,645	297,255	39,796	338,824	354,469
E	31,003	1,550	29,453	3,943	33,572	35,122

Remotes				PV PMT's in Year 10(4)	Add 5% Down	(X 0.3855) Discount to Year 0
A	427,434	21,372	406,062	54,363	462,847	484,219	186,687
B	53,975	2,699	51,276	6,865	58,447	61,146	23,572
C	509,497	25,475	484,022	64,800	551,710	577,185	222,505
D	74,155	3,708	70,447	9,431	80,299	84,007	32,385
E	395,141	19,757	375,384	50,256	427,879	447,636	172,564

1 From Contract Administration, DLWM. Includes discount.

2 Calculated as payment = Principal $\left[\frac{i}{1-(1+i)^{-n}}\right]$

Where i = 12% interest and n = 20 years.

3 Present value of 20 years of payments discounted at 10%.

4 Present value of 20 years of payments beginning 10 years after staking. 5% down assumed to be paid in 10 years.

APPENDIX 5B

Background Data and Scenario Assumptions for Fiscal Impact Calculations

1. City Population Estimate

Fairbanks population	25,568[a]
North Star Borough Population	58,313[a]
Average number of people in household in the Fairbanks area	2.6[a]

2. Budget Costs (operating expenses and Debt Service)

	City of Fairbanks[b]	Fairbanks North Star Borough[c]
General Government	$ 8,497,808	$ 5,965,000
Public Safety & Fire	3,465,691	N.A.
Public Works	2,381,906	2,589,332
Recreation and Other Services	946,689	3,361,000
Debt Service	744,255	5,125,575
Service Areas	N.A.	791,554
Total	$16,036,349	$17,832,461

3. Expenditures for Schools

The North Star Borough School District has an operating budget of $9,600,000. and the average size of the student body is 10,886 (N.S.B. School District, personal communication). The average number of school-age students per household is estimated to be 1.255 (Burchell and Listokin, (1978) p. 35). If there are 21 households, then the subdivision may contribute 26 students to the school population. The average cost per student is 9.6 million/10,886 or $822/student. Twenty-six students would increase shool costs by roughly $23,000.

4. Scenario Assumptions

Type of Use	Avg. House Value	Land Type A	B	C	D	E
		Average Parcel Value				
		27,000	15,000	3,000	2,000	1,000
		% of Each Land Type				
Residential	$50,000	80%	25%	10%	0%	0%
Self-Sufficient (incl. labor	$25,000	0%	25%	40%	80%	100%
Recreational /Seasonal	$15,000	20%	50%	50%	20%	0%
Average value per parcel built (rounded to nearest thousand)		70,000	41,000	26,000	25,000	26,000
Percent sold of offered		100%	100%	100%	70%	60%
Percent built of sold (5 yrs.)		50%	40%	40%	30%	20%
Percent built of offered (5 yrs.)		50%	40%	40%	21%	12%
Average Value per Parcel Offered		35,000	16,000	10,000	5,000	3,000

5. Construction Costs[1]

1. 10 mile gravel road (275,000 x 10) = 2,750,000
2. 1 room school ($100,000 -150,000) 200,000
3. Airstrip ($1-2 million) 1,500,000

Assumed Average Capital Cost $2 million
or $50,000/parcel
or $ 2,500/parcel per year for
a 20-year life

6. Government Operating Costs/yr.

1. Road maintenance $2,700/mile earth or gravel (Interior Average)[2]

2. Schools $880/student (FNSB average)

3. Other Government Services (excluding public safety) $280/person or $700/household (FNSB average)[3]

(a) Alaska Dept. of Labor, Alaska Population Overview, 1981 (1982)

(b) City of Fairbanks, FY82 Budget, costs represent 1981 Approved Approriation

(c) Fairbanks North Star Borough, FY 81-82 Budget

[1] Estimates of range from DOT/PF staff, 1982

[2] Louis Berger and Assoc., and ATC, Interior Transportation Study, Highway Working Paper, May 1982, for a graded earth road maintained by the state

[3] Fairbanks North Star Borough 1981-82 Budget

Chapter 6

Supply Compared to Demand

INTRODUCTION

As shown in Table 6-1, results of the demand assessment (Chapter 3) indicate that the gross area needed to meet demand in the next five years is 193,993 acres. This is divided into the various land quality types.

Table 6-2 shows the supply of "capable" state owned land compared to demand. The supply includes all state selected, TA'd and patented land in the Basin **exclusive** of those acres which have very severe soil limitations or which are located on treeless areas (see Chapter 4 for more details). The supply does not consider land which may have value for other uses; only its value for settlement has been taken into account. The supply of private, Borough and Federal land which may be available to meet the demand was not available but should be noted in any policy decisions.

I. Supply and Demand for Land along Roads

Quality Type A land is located within 2 miles of a road and within 40 miles of Fairbanks or 25 miles from another community. There are an estimated 291,800 acres of state selected, TA'd and patented land of Type A in the Basin which is suitable for development. Much of this land is valuable for many other uses as well. Much of this land is selected or otherwise encumbered by mining claims etc. and is therefore not available for immediate disposal.

In both Fairbanks, and the majority of the smaller communities, most of the Type A land is in either native, borough or private ownership. The Borough owns approximately 54,000 acres of Type A land. In most of the rural communities, native village corporations are owners of the majority of Type A land.

Within the next five years, 109,600 gross acres of Type A land would be needed to meet the demand for state land. This figure was calculated based on land prices where the state discount was used. This figure does not represent the demand for land under the current pricing system where no discount is in effect. However, the figure does give an order of magnitude estimate of demand. Much of this demand may be met by the Borough and private sources. If no other resources are taken into account, there is a small surplus of Type A land.

Quality Type B land is also located within 2 miles of a road but greater than 40 miles from Fairbanks and greater than 25 miles from other communities. There are an estimated 110,500 acres of state selected TA'd and patented Type B land in the Basin suitable for development (not considering other resource values). The remaining Type B land is either in native or private ownership.

Within the next five years, 12,350 gross acres of Type B land would be needed to meet the demand at current state discounted prices. Much of this may be met by the Borough or other sources. This indicates that there is likely to be a large surplus of Type B land.

II. Waterfront Property and Land near Airstrips

The supply of state land in this category is estimated to be 11,100 acres in the Tanana Basin. The supply of this type of land in native ownership is fairly significant, particularly in the Upper Tanana Region. It can be expected that some of these lands will be sold over the next 20 years. The demand over the next five years is estimated to be 26,558 acres, and therefore, even if there were no resource conflicts on this type of land, the state does not have an adequate supply to meet the demand.

III. Land within ¼ miles of Water or an Airstrip

The state owns or has selected an estimated 22,400 acres of this type of land. Additionally, there are significant amounts of this type of land in native ownership. The demand is estimated to be 12,875 acres and therefore, if there are few resource conflicts, there is likely to be enough land to meet the demand for Type D land.

IV. Remote Land

This land is greater than 2 miles from a road and greater than 1/4 mile of water or an airstrip. The supply of this relatively inaccesible land in the Tanana Basin is estimated to be 1,912,400 acres (selected, TA'd and patented). There is a significant amount of this type of land in native ownership in the Basin. The demand for this type of land over the next five years is estimated to be 32,632 acres. Therefore, if there are few resource conflicts in these areas, the supply is more than adequate.

TABLE 6-1
SETTLEMENT
GROSS ACREAGE DEMANDED FY'84-88[1]

	Type A	Type B	Type C	Type D	Type E	Total
FY'84	20,334	2,294	5,018	2,431	6,168	36,245
FY'85 & '86	43,871	4,943	10,335	5,014	12,700	76,863
FY'87 & '88	45,373	5,113	11,205	5,340	13,764	80,885
TOTAL	**109,578**	**12,350**	**26,558**	**12,875**	**32,632**	**193,993**

[1] From Chapter 3, Part 1 of this report.

TABLE 6-2
SUPPLY COMPARED TO DEMAND

Demand	109,578	12,350	26,558	12,875	32,632	193,993
Supply of Capable, State-owned or Selected Land	291,800	110,500	11,100	22,400	1,912,400	2,348,200
Difference Between Supply and Demand	182,222	98,150	-15,458	9,525	1,879,768	2,154,207

Chapter 7

Recommendations

MANAGEMENT RECOMMENDATIONS

A. RECOMMENDATIONS FOR DESIGNATIONS

The following discussion describes what the state should do in each subregion of the Basin to provide adequate land to Basin residents for residential, recreational, and remote use.

1. Land Sales in the Fairbanks North Star Borough

a. Land for Community Expansion

Land for community expansion in the Borough is usually quite popular. If the site is within reasonable commuting distance (within 25 miles) and has good drainage, most of the parcels are likely to sell.

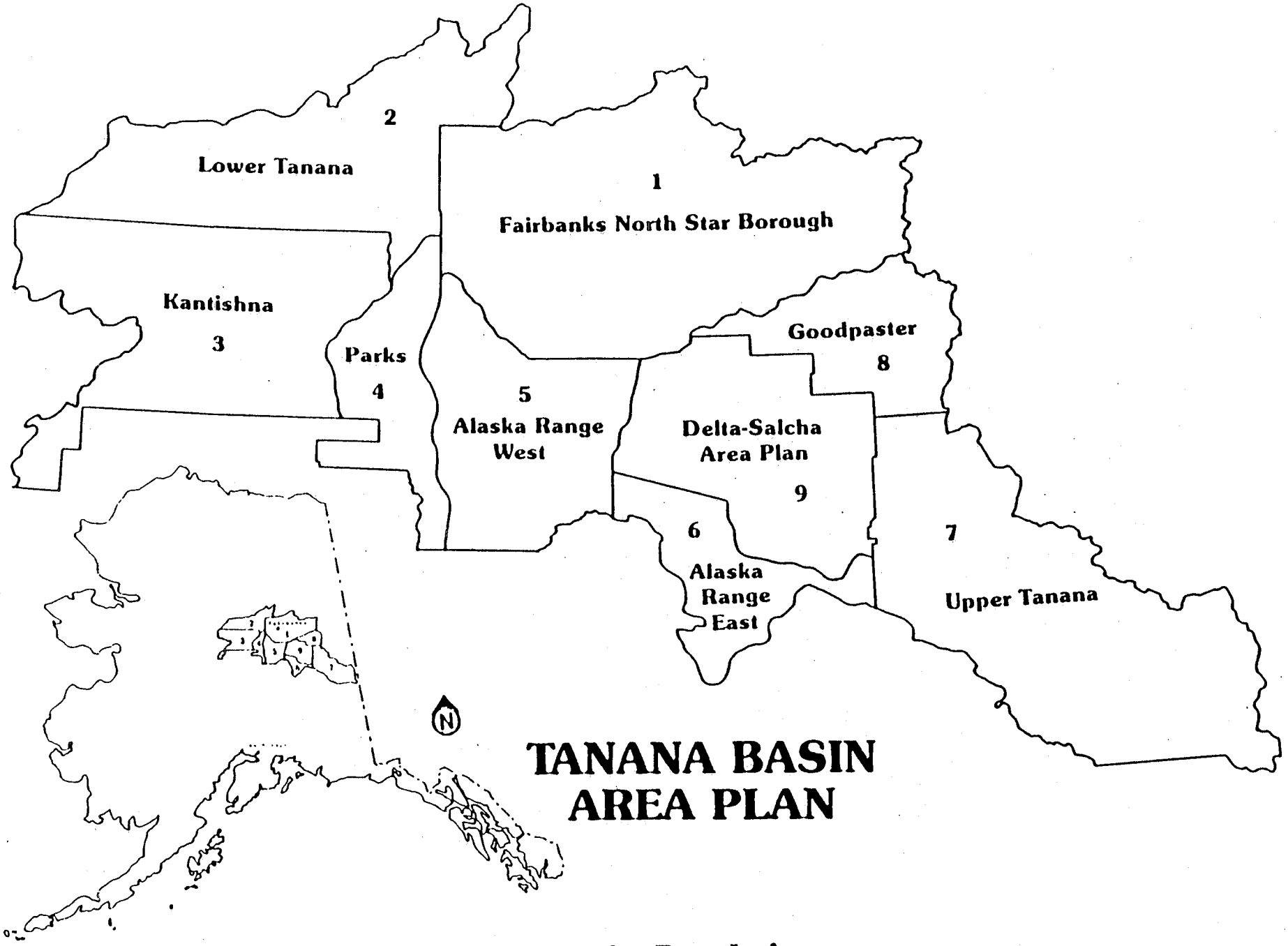
However, most community expansion land in state ownership has already been sold or is otherwise encumbered. When the state land in the State Forest are excluded and when mining claims, past disposals, and poor soils are taken into account, there are only a limited number of areas of state land left in the Borough which are suitable for community expansion.

The Borough population is expected to grow from 53,983 people in 1980 to 91,400 in the year 2000, an increase of 37,417 people (Socioeconomic Paper, RAS/DLWM, 1982). There is currently adequate land in private ownership to meet the needs of the existing population, assuming an average household requires 1 to 4 acres of land and that the average household contains 3.3 people.

This additional population will need between 11,000 and 45,000 acres of land by the year 2000. There are three principal sources of land to meet this need: the state, the Borough and private land.

The state currently has 1,182 acres of land suitable for community expansion available for sale over the counter. The Borough owns 110,000 acres, much of which is expected to be sold. Of this, approximately 54,000 acres are of "high quality" for community expansion (i.e. land that is well-drained, easily-accessed and within 25 miles of Fairbanks). This land is expected to be sold at a rate of roughly 2400 acres per year. There are also approximately 100,000 acres of private land principally in the Fairbanks area.

Thus, there is a total of over 160,000 acres of good quality land currently available for community expansion, compared to a need of between 11,000 and 45,000 acres. Because there is an abundant supply of community expansion land, it is not necessary for the state to sell areas close to Fairbanks if there are very serious resource or public conflicts. There are a total of 5,500 net acres of land that is relatively conflict free in the Borough that should be sold.



Map 2. Subregion Boundaries

b. Recreational Subdivisions and Homesteads

These sales are generally very popular if located in areas where recreational opportunities exist. Excluding land purchased for speculation, the cumulative need for recreational land in the Borough is estimated to be between 4,000 and 19,000 acres by the year 2000 (see the Settlement Element, DLWM,1983).

The two principal owners of this type of land are the Borough and the state. The Borough owns roughly 30,000 acres of land suitable for this use, most of which is likely to be sold within 20 years. The state owns land along the Chatanika River, Chena Hot Springs Road and the Steese and the Elliott Highway which would be suitable for recreational parcels.

There is a total of 5,500 net acres of land in these areas that should be sold as subdivisions.

An additional 20,000 acres should be offered for fee homesteading in this area. This will adequately meet resident's needs for land in the Borough.

c. Agricultural Homesteads

Land sales under the small agricultural program have been extremely popular. Of 23,012 acres offered for sale in the Fairbanks North Star Borough over the past four years, 22,039 acres or 96% have sold.

An estimated 85,000 to 740,000 acres of land for small agriculture is needed over the next 20 years. Although need by subregion is not available, it is reasonable to assume that it is likely to be highest in the Borough where there is better access and a larger population.

State-owned lands with agricultural potential which could be sold to meet this need are in short supply and lie in two general areas: along Washington and Aggie Creeks and along the Chatanika. According to the exploratory soils survey, there are approximately 5500 acres of land, much of which is likely to be suitable for agricultural homesteads, in the Washington Creek and Aggie Creek areas. These areas should be sold.

2. Land Sales in the Lower Tanana Subregion

a. Land for Community Expansion

The state owns land for community expansion near the communities of Tofty, Livengood and Eureka, but it does not own land that could be used for community expansion purposes in Manley or Minto. Due to the small population in Tofty, Livengood and Eureka (less than 50 people), very limited land sales are recommended.

b. Land for Recreational Use and Self-Sufficient Living

The state owns large amounts of land between Livengood and Manley that could be sold for recreational use, but the sale of these areas would not be particularly popular. The land is not of very high quality and there are few recreational amenities that would draw people to the area. Consequently, only a few disposals should be offered between Livengood and Manley.

The state land between Fairbanks and Livengood is more desireable for recreation. These areas are closer to Fairbanks, and are adjacent to the Steese White Mountain Recreation Area. In this area, homestead areas and subdivisions will be offered for sale.

c. Small Scale Agriculture/Agriculture Homesteads

There have been no previous sales of small agriculture parcels in this subregion. However, based on the popularity of small agriculture sales in other parts of the Basin and the need for between 85,000 and 740,000 acres of small agricultural lands Basinwide by the year 2000, it is likely that small agriculture disposals in this region would sell if offered.

After completion of detailed soil surveys to verify the adequacy of the soils, areas with minimal conflicts should be offered for settlement under the small agriculture and agriculture homestead program. Areas closer to existing communities will be offered first, with lands farther away offered later. The sales should be distributed over 20 years. Since similar land has not been offered in this subregion, response to sales should be evaluated after 3 years and the pace and extent of sales adjusted according to local need. Approximately 20,000 acres should be offered for agricultural use in the region.

3. Land Sales in the Kantishna Subregion

a. Land for Community Expansion

The only community in the Kantishna Subregion is Lake Minchumina. Parcels of land in this area are used for both recreation and year-round residential use. Further land sales in the vicinity of Lake Minchumina are therefore discussed in the section on land for recreational use.

b. Recreational Land and Land for Self-Sufficient Living

Of the total acres offered in the past four years for recreational subdivisions in this unit, approximately 40% have sold, but only 7% of the remote parcel offerings have sold. The state owns most of the land in this region, however the vast majority of it is inaccessible and of very poor quality. Popular land sale areas lie on fly-in lakes and along the navigable portions of the rivers of the region. Most of the lakes and a few of the rivers already have land sales on them. The remaining lakes and some of the remaining riverfront property should be sold. Approximately 30,000 acres should be offered for recreational land use in this region.

This is more than double the maximum projected need for this type of land for the entire Basin to the year 2000. This abundant supply should allow for investment and provide buyers with a large degree of choice.

c. Land for Agricultural Homesteads

There have been no previous sales of small agriculture parcels in this subregion. Due to the lack of access, the distance from markets and the high cost of farming in this region, it is not likely to be feasible to meet the development schedules required on agricultural homesteads and small scale agriculture parcels. Therefore, none of these are recommended at this time. Meanwhile, lands in this subregion with agricultural potential should be placed in the resource management category with agriculture a primary value.

4. Land Sales in the Parks Highway Region

a. Land for Community Expansion

There are 5 communities in this region. Land should be sold in the vicinity of Nenana, Healy, McKinley Village and Anderson to meet the community expansion needs of those communities. The population of this area is expected to increase by 1900 people by the year 2000, and the land needs of this new population are estimated to be between 575 and 2,300 acres.

In the Nenana area, land for community expansion is in both native and state ownership. Several areas of state land should be offered in the vicinity of Nenana. The amount of land offered will greatly exceed projected land conversion needs of the Nenana area, even if the Nenana Totchaket area is developed.

In the Anderson area, people want more land sales immediately adjacent to the town. To meet this need, several areas should be identified for sale. These sales would allow for a wide degree of consumer choice and provide abundant land in the Anderson area.

In Healy, the same situation exists. Although the state has sold large acreages of land in the vicinity of Healy, more land is wanted. New areas should be identified for sale in the Healy area. Along with the land that was sold in the past this should more than adequately meet resident's needs, even if the coal operations in Healy greatly expand.

In McKinley Village, the limited amount of state land in the area should be used for community expansion. Land that is proposed for a land trade with the National Park Service should be sold.

b. Recreational/Seasonal and Self Sufficient Land.

Past land sales in the Parks Highway region for this type of use have not sold particularly well: 20% of past subdivisions and 27% of remotes were taken. The state has already offered for sale the majority of accessible state-owned land in the region and there are 29,000 acres left in past sale areas along the Parks Highway that will continue to be offered for sale. In addition to these past sale areas, approximately 2,000 new acres of subdivision and 20,000 acres for homesteads should be identified.

c. Agricultural Land

In the past four years, 100% of the acreage offered under this program (4876 acres) has been sold in the Parks Highway Subregion. It is assumed that future sales will be equally popular. Approximately 27,000 acres of agriculture land should be identified in this unit.

5. Land Sales in the West Alaska Range Subregion

Some additional land should be sold in this subregion. Because of the limited availability of high quality land, access problems, and conflicts with minerals and fish and game more land should be offered in past sale areas in the region, rather than opening new areas.

6. Land Sales in the East Alaska Range Subregion

a. Land for Recreational/Seasonal Use and Self-Sufficient Living

Land available for settlement in this region is very limited due to terrain. However, there are some high quality settlement areas around the Summit, Tangle and Fielding Lakes that should be sold. The sales would be extremely popular.

b. Small Scale Agriculture/Agricultural Homesteads

There are no soils suitable for agriculture disposals due to the elevations encountered in this area.

7. Land Sales in the Upper Tanana Subregion

a. Land for Community Expansion

The upper Tanana Region population is expected to increase by 425 people by the year 2000 (Socio-Economic Paper, RAS/DLWM, 1982). If the current population of 1,120 people has adequate land to live on, then between 425 and 1,700 acres would be required to meet the building needs of the growing population (Settlement Element, DLWM, 1983).

Sales of community expansion land have been fairly popular in the past: 59% of the acres offered have sold. This leaves a total of 1,970 acres available over-the-counter for community expansion needs in the future; more than double the projected need under the high scenario. In addition to the land available over-the-counter.

The Native Corporations also own land in the immediate vicinity of most of the communities. Some of this land is likely to be sold over the next 20 years.

Native landholdings and past state sales are likely to create a large surplus of community expansion land in the subregion for all of the villages except Northway, where no state land has been offered (the Native corporation is planning to offer some near northway, however). In this area, the state should offer a small subdivison of approximately 100 acres within the next 5 years, with an additional 100 acres set aside for possible disposal within 5 to 20 years.

In the Tok area, the state should identify more land for sale; however, the land should not be offered until more of the currently available areas have been sold.

b. Recreational and Self-Sufficient Subdivisions and Homesteads

Past state sales of this type of land in the Subregion have not been particularly popular due largely to poor drainage and difficult access. Only 10% of the available remote acreage has been staked. Native lands, however, may offer higher quality land on lakes and rivers. Dot Lake is considering offering land on Lake George and over the next 20 years othercorporations are likely to offer recreational land.

In this area it is proposed that the state continue to offer the 2,030 acres of land still available in past disposals before offering new projects. In addition to these lands the state should identify a moderate amount of new land for sale in the area.

c. Agricultural Homesteads

There should be no areas recommended for large scale agriculture in this subregion due to the high elevation and harsh climate. There is interest in agriculture in the area, however, and an area of at least 1,000 acres should be available for this purpose.

8. Land Sales in the Upper Goodpaster Subregion

In the past, there have been no land sales in this region. The area is largely inaccessible. Because of this, only two areas should be identified for sale. Two projects of approximately 4,000 acres should provide adequate opportunity for those wishing to settle or recreate in this remote region of the Basin.

B. OTHER MANAGEMENT GUIDELINES

1. Land Use Needs

Regional demand assessments for settlement lands will include estimates of land necessary for projected conversion to residential, commercial, industrial, public facility and recreational uses, based on projected population levels. The disposal program will give a high priority to ensuring the availability of an adequate supply of land to meet these needs, including an amount necessary for market choice.

The state also will make available a modest supply of land for investment beyond what is necessary for actual use. However, providing land for specific needs will be a higher priority.

2. Long-Term Program

The disposal program will be designed to make land available for at least twenty years to ensure that Alaskans in the future have the opportunity to purchase public land.

3. Price and Terms

The state will make land available to be earned by personal investment of time and effort in homesteads and homesites. This will continue to result in acquisition of those lands at less than fair market value. Aside from this, fair market value should be received for public land sold to private parties. This does not preclude offering generous payment terms. An exception to the policy of receiving fair market value may be made in areas where the price of land is judged exceptionally high based on the price of comparable land throughout the state.

4. Competition with the Private Market

The state will not seek to minimize competition with private land markets by changing or reducing its land offerings. In fact, a legitimate objective of the disposal program is an anti-inflationary effect on land prices, which may mean selling enough land in certain areas to reduce the artificial rate of appreciation of private land values. The state, however, will not undercut the market with artificially low prices.

5 Protection and Management of Natural Resources.

In its settlement program, the state will protect the economic potential of public lands with high value for oil and gas development, minerals, coal, commercial forestry, tourism, agriculture and the production of fish and wildlife resources. Exceptions to this guideline may be made where land is needed for community expansion or other important purpose and no other suitable land is available.

When the state sells land in locations and amounts that have high potential for commercial agricultural use, only agricultural rights to that land should be sold. This policy is not intended to mean that all land with high agricultural potential will be designated for agricultural use. Some of these lands may be retained for forestry management or other public uses. However, if lands with high commercial agricultural potential are to be sold they generally should be sold for agricultural use rather than alternative uses such as settlement. An exception to this policy may be made where land is needed for community expansion or other important purpose and no other suitable land is available.

Lands with high commercial forestry potential generally should not be sold for residential use. Also, land offerings generally will be avoided in areas of high mineral potential and where numerous valid active mining claims exist.

6 Protection of Life and Property.

The state will, by retention of public lands, discourage development in areas of flooding, unstable ground, significant avalanche risk, poor percolation for septic tanks and other hazards.

Public lands within the surveyed 100-year floodplain should remain in public ownership except where a regulatory floodway and flood fringe have been identified through detailed hydrologic studies. When such studies have been done, public lands within the flood fringe may be offered for sale. Land offerings within the flood fringe should be for low density development for example, private recreation cabins or agriculture rather than dense residential subdivisions.

In drainages where the 100-year floodplain has not been surveyed, the best available information will be used to determine the flood hazard zone which should remain in public ownership. In areas where no alternative land is available for development, the Director of the Division of Land and Water Management may make exceptions to these floodplain guidelines.

Lands generally will be retained where slopes are predominantly north-facing and steeper than 25 percent. This will hold in public ownership many lands where permafrost is prevalent, where shadows prevail for four months of the year, and where the vegetation is predominantly black spruce. These sites are among the least appealing residential environments.

7. Protection and Management of Valuable Environmental Processes

The state will attempt to provide a publicly-owned open space system to preserve important fish and wildlife habitats and natural areas such as estuaries, shorelands, freshwater wetlands, watersheds, and surface and ground water recharge areas.

Wetlands with important hydrologic, habitat or recreational values and adjacent buffer strips will be retained for open space.

Systems of publicly owned land will be designed to provide the necessary linkage and continuity to protect or increase values for human uses and wildlife movements.

8. Protection and Enhancement of Scenic Features

The state generally will retain in public ownership unique natural features such as cliffs, bluffs, waterfalls and foreground open space for panoramic vistas. Public access to such amenities also will be preserved.

Land disposal offerings along scenic roads popular for sightseeing will be selected and designed to minimize their impacts on scenic vistas. Unusual landforms or scenic features will be retained in state ownership for enjoyment and use by the public. Such lands include islands in lakes, rivers or ocean bays unless land disposals can be designed to prevent negative effeccts on the scenic and recreational values of the area.

9. Protection and Enhancement of Recreational, Educational and Cultural Opportunities

The state will retain areas for outdoor recreation, trails, campsites, boat launches, fairgrounds, historic sites, areas for scientific study, etc. Areas for both intensive and dispersed use will be preserved.

10. Providing Public Land for Communities

The state will reserve greenbelts, public-use corridors, personal-use wood lots, buffer areas, commons, building setbacks, and other open spaces to help create a desirable land use pattern in developing areas.

11. Reservation of Land for Future Urban Development

Public lands will be retained as a transitional tool to help shape community development by precluding premature private development on sites intended for schools, gravel pits, roads, parks, sewer treatment plants, etc.

12. Cost of Public Services

In accordance with AS 38.04.010, the Department will attempt to guide year-round settlement to areas where services exist or can be provided with reasonable efficiency. State land that is located beyond the range of existing schools and other necessary public services, or that is located where development of sources of employment is improbable, may be made available for seasonal recreation purposes or for low density settlement with sufficient separation between residences so that public services will not be necessary or expected.

DNR will set a high priority on seeking funding to implement the provisions of AS 38.04.021 to assist municipalities in their disposal programs with the aim of making land available in and around established communities.

13. Provision of Access

DNR will comply with the capital improvement provisions of local government subdivision ordinances. Where no subdivision ordinance is in effect DNR will ensure the existence of actual physical access (air, water, road or rail) to each new state subdivision.

14. Local Plans

DNR will comply with provisions of local comprehensive plans regarding the pace, location and density of land development, except to the extent that local requhrements discriminate against state land or violate a major overriding state interest.

15. Carrying Capacity — Firewood and Houselogs

Sales in remote areas intended for recreational or seasonal use or homesteads will take into consideration the sustained yield carrying capacity of the area for production of firewood and houselogs. This policy applies only where there is no road access and where firewood is expected to be a substantial source of fuel and/or houselogs are expected to be a substantial source of building material.

In remote areas DNR will attempt to cluster disposal offerings where sufficient public land exists for the gathering of firewood and houselogs and for hunting and fishing. By clustering these offerings, the state will maintain options for later decisions regarding neighboring public land when access develops.

16. Design Review Board

A local design review board will be established when, in the opinion of the Director of the Division of Land and Water Management, it would be a constructive way to involve persons affected by a disposal project. A design review board will consist of a maximum of eight citizens and local government officials appointed by an appropriate local government official. Where local government does not exist or is unwilling to appoint such a board, DNR will make the appointment, if sufficient interest exists.

The design review board will participate in and review all stages of design, including location, design of parcel size, transportation routes, open space, etc. The board will make recommendations to the Director of the Division of Land and Water Management at appropriate points in the design process.

17. Cumulative Effects

Chances for inadvertent and undesired cumulative effects will be minimized by a planning process that examines the impacts of various region-wide comprehensive land use scenarios. DNR's statewide and area planning program attempts to do this and will be used to establish regional land offering and disposal policies for state lands (see Guideline No. 21 below).

18. Subdivision Design

Subdivisions will be designed to preserve and enhance the quality of the natural setting and the recreational opportunities that make an area attractive to potential buyers.

The following slope/lot size standards should generally be applied in state subdivisions (on-site waste disposal assumed):

Percent Average Slope	Minimum Lot Size
0-12	1 acre
13-20	4 acres
21-30	10 acres
>30	No development

Other procedures and standards for subdivisions design will be as set forth in "Design of Residential and Recreational Subdivisions," in the Division of Land and Water Management's Policy and Procedures Manual.

19. Easements

Easements will be used as a means to acquire rights to privately owned lands needed for public use.

Easements generally will not be used as a means of retaining a public interest in lands within a subdivision. Exceptions to this policy may be made where the expense of surveying lands for retention is prohibitive or where the interest protected is very limited such as for local pedestrian access. This policy will minimize confusion between public use rights and private ownership rights.

20. Owner Staking

In areas where severe land use conflicts and inefficient use of resources are expected to result from owner staking, DNR will offer homestead parcels with prestaked or predesignated boundaries.

21. Statewide and Regional Disposal Plans

The Department will publish annually a statewide land offering and disposal plan. It is important that Alaskans be able to review the amounts and locations of land disposals which would result from the application of DNR's land disposal policies. The statewide disposal plan will incorporate regional land disposal plans and present recommendations for land offerings in each region of the state. The recommendations would be based on DNR's land disposal policies as well as on analyses of land suitability, supply and demand studies, consideration of competing land use values, transportation systems and other factors of regional concern.

The statewide plan will present regional land offering recommendations for two planning periods. Five-year recommendations will be specific regarding location, acreage and project type for each year. A twenty-year disposal pool also will be established consisting of the areas where DNR anticipates future disposals offerings. Because of the need to respond to changing demands, fluctuating funding levels and new information, the statewide plan will be reviewed annually and modified as necessary.

22. Coordination with Local Governments

State land offering programs should be coordinated with similar programs of local government to best achieve common objectives.

To this end, DNR proposes the annual development of a joint disposal plan with each borough (for both state and borough lands). This plan would be based on consideration of the borough's road extension priorities and its plans for levels of services in different areas -- in short, on local fiscal planning. If a borough has a comprehensive land use plan, that plan will provide direction for disposal priorities. The disposal plan should demonstrate what community objectives are being met, and how the requested capital improvement funding would support a borough-wide set of priorities for roads and service extensions to benefit current residents as well as new ones. The disposal plan should demonstrate how increased access and development would serve other resources uses such as agriculture, mining, forestry and recreation, and thus have state as well as regional benefits.

Joint borough/state disposal plans as described here would constitute sections of the statewide disposal plan discussed above. Where there is an ongoing DNR area plan, that plan would provide the means of coordinating borough and state disposal planning.