As one in a series of eight articles written by different professionals concerned with Alaska Native land claims, this article focuses on the influence of change and competition in land use planning. Designed to stimulate careful political/historical assessment at an advanced secondary or adult level, this booklet presents a vocabulary list, 9 open-ended questions, and 10 questions for group discussion. Among the major issues presented in the text are:

1. elements involved in the land planning process (goal vs. limitations);
2. the need for cooperative community planning and the means by which compromise can be affected for the following land needs: private and public buildings, open space recreation, resource exploitation, scenic and historic settings, and community revenues;
3. the special environmental, governmental, and economic problems of Alaskan land use (permafrost, a poor water supply, flooding, waste disposal, and air pollution when coupled with high labor and equipment costs and governmental problems of land ownership and planning authority make Alaskan problems unique);
4. the influence of the Settlement Act on community planning (village land bases must be joined with others to maintain subsistence; Native capital needs seed money which may subvert Native control; and Native goals are divided between maintaining and selling resources). (JC)
planning how to use land in
village
alaska

One of a Series of Articles on
THE NATIVE LAND CLAIMS
PLANNING HOW TO USE LAND IN VILLAGE ALASKA

By

Bob Weeden
Professor of Wildlife Management
University of Alaska

One of a Series of Articles on

THE NATIVE LAND CLAIMS

COMPiled & PRODUCed JOINTLY BY

ALASKA DEPARTMENT OF EDUCATION

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CENTER FOR NORTHERN EDUCATIONAL RESEARCH
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Dr. Marshall L. Lind
Commissioner of Education

Frank Darnell
Director, Center for Northern Educational Research

ARTWORK: CANDACE OWERS

JUNE 1975
TO THE READER

This booklet is one of a collection of articles written by people who are interested in Native land claims. As you will see, all of the people do not agree. They present their ideas for you to read and discuss. You may be excited about some of their ideas because you think they are absolutely right, or very wrong. When you have finished reading the articles, you will probably have done a lot of thinking about Native land claims and Alaskan politics.

Politics is not an easy field to understand. And yet politics is what the Native land claims are all about. Most of the articles were written by people who have spent a lot of time working in the world of politics. These people have a whole vocabulary which most students have not yet learned. So, to help students understand the reading, there is at the beginning of each article a list of definitions of terms. Any words in italics are explained for you at the beginning of that article, or an earlier one.

At the end of some articles are questions which you can ask yourself. In the margin, next to the question are numbers. If you go back to paragraphs in the article with the same numbers, and reread, you can increase your understanding. We cannot say you will always have definite answers but you may form your point of view.
ARTICLES AND AUTHORS

Stock, Corporations, and the Native Land Claims Settlement
Stephen Conn
Associate Professor of Law
ISEGR, University of Alaska

Environmental Issues in the Land Claims Settlement
Guy Martin
Alaska Legislative Aide to the Late Congressman, Nick Begich

New Tribes for New Times
Guy Martin
Alaska Legislative Aide to the Late Congressman, Nick Begich

The Politics of Passage
Guy Martin
Alaska Legislative Aide to the Late Congressman, Nick Begich

Politics and Alaska Natives
Harold Napoleon
Director, Yupiktak Bista

Village Alaska
Harold Napoleon
Director, Yupiktak Bista

Future Land Use Planning
Walter B. Parker
Associate in Systems Planning
Arctic Environmental Information and Data Center
University of Alaska

Alternatives for Alaska
Planning How to Use Land in Village Alaska
Bob Weeden
Professor of Wildlife Management
University of Alaska
PLANNING HOW TO USE LAND IN VILLAGE ALASKA

INTRODUCTION

This essay is about land use planning and how it can improve the life and growth of small Alaskan communities.

The phrase "land use planning" is common as canvas and often seems to cover as many different things. A good definition of land use planning is deciding how to meet the needs of people by using and caring for the land available. (Land, used in this way, means a geographic area together with its waters, air, climate, soils, plants, animals, and natural resources, which can be sold.

Many groups of people are planning the use of land in Alaska. private landholders, industrial and Native corporations, communities, boroughs, regions, the state, and the federal government. Why so much attention to land use planning? The reasons can be summed up in two words: competition and change.

Every thoughtful Alaskan can see changes taking place in his community. Physical growth is often the most easily noticed change because of the roads, schools, homes, airports, and other facilities that have been built to serve the growing number of people in Alaska. 6,000 to 12,000 people have been added to Alaska's population every year since 1967.

There are a number of reasons for changes in the population of cities and villages in Alaska. Some are economic: the rise in oil development, fewer and fewer military personnel and operations, and the greater number of jobs in government and service industries. The Native population of the state is increasing because of amazing improvement in Native health during the 1950's. Within the state, large numbers of people move from one town to another. The successful fight of Native political organizations for settlement of Native land claims will have important effects on community development and land use in the future.

Cities and villages of Alaska are affected by more than just changes within the state. They are also affected by national or even worldwide forces like oil politics and energy shortages, economic recessions and inflation, relations
between the United States and Japan, and environmental politics. As just one small but important example, consider what might have happened within Eskimo and Aleut villages along the Bering Sea coast if early versions of marine mammal protection bills had been passed by Congress, making it illegal for anyone to harvest walrus, seals, or whales, and wiping out the fur seal industry.

A thoughtful person, seeing these changes in Alaska, can see that the demands on land and natural resources are increasing fast throughout the state, and that Alaska, huge as it is, is still not big enough to satisfy all of these demands. Arguments are very often the result of competition arising from demands which cannot be met. Forces over which Alaskans themselves have no control as well as matters which they can control or guide, determine the course of events in every community. So community land use planning must be salted with realism and able to survive unexpected events.

The purpose of this essay, which can cover only a tiny fraction of the field of land use planning, is to describe community land planning so that its purposes, needs, and limits are understood, and to discuss some of the needs and opportunities for land planning that small Alaskan settlements face today.

Elements of Land Planning Processes

Imagine a young couple starting a home at the edge of a coastal town in Alaska. The land they own, about 10 acres, is on the bank of a stream where it runs into a bay. They need a house, a mooring for their gillnetter, a source of water, and a way to town, they would like to have a garden in summer, a storage shed, and a sheltered view of the sea.

The lay of the land, how good the water is, and the kinds of soil on the land, will be extremely important as the couple decides where to build the house and other facilities. The cost (in effort as well as dollars) of building in different locations will have to be considered too. (For example, lumber has to be brought in by boat. The man is fishing all summer and has only a very short time to build the house. Therefore, he probably won’t build far from his anchorage even if a better site exists farther from shore.) The couple’s plans will take shape over months or years, and will be reshaped by unexpected events, a storm that erodes the bank protecting the house, increasing pollution of the creek, or triplets.
In this simple and familiar case of land use planning the planners started with a general picture of the kind of life they wanted to lead, spent rather a long time developing specific goals (such as house plans), fit these into the advantages and limitations of the land they owned, and at times changed their plans of their own free will or of necessity.

These are the important elements of community land use planning as well. The difference is in the greater number of competing needs of the community in comparison with the family, which cause all kinds of political problems.

Need for Community Land Planning

The lives of townspeople are so bound up in buildings and people - schools and school teachers or schoolmates, homes and families, working places and fellow workers, airports and travelers, etc. that it is easy to develop the idea that land is simply so much stage and scenery. Really, all communities, big or small, are a part of the land around them. Communities are built in a certain place because of what the land provides there, such as good harbors, nearness to fish or game populations, closeness to a river or road or air strategic defense location, or closeness to a mineral deposit or stand of timber. A town's layout, shape, number and closeness of houses, and general physical character are partly decided by the shape of the land, the way water drains, and types of soil. But the people of communities may make decisions to change the land: they may move dirt, change the direction of water drainage, use up or take care of wildlife and forests, change local temperature and windspeed, and build up or use up good soil.

Many, perhaps most, Alaskan communities have grown up without thoughtful, cooperative planning. When "unplanned" communities are small, are growing slowly or not at all, and are made up of people with similar ways of living, they can be pleasant, efficient places.

Communities that are growing rapidly or have changing, mixed populations, however, rarely make good use of their natural surroundings without group-planning efforts.

Let us look briefly at some of the needs of communities which make them start land use planning. There are five different categories of land needs for most communities:
1. Land for building

<table>
<thead>
<tr>
<th>Private facilities</th>
<th>Public Facilities</th>
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<tbody>
<tr>
<td>homes</td>
<td>airports</td>
</tr>
<tr>
<td>recreational cabins</td>
<td>roads</td>
</tr>
<tr>
<td>private docks, floats,</td>
<td>public docks, harbors</td>
</tr>
<tr>
<td>moorings</td>
<td></td>
</tr>
<tr>
<td>stores, service stations</td>
<td>dumps, sewage treatment plants</td>
</tr>
<tr>
<td>fish canneries</td>
<td>water storage reservoirs</td>
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<tr>
<td>sawmills</td>
<td>power generation facilities</td>
</tr>
<tr>
<td>lodges</td>
<td>schools, meeting halls</td>
</tr>
<tr>
<td>(and many other structures)</td>
<td></td>
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</tbody>
</table>

To decide where these structures can and should be built, people must consider distance and condition of roads or rivers from built up areas, soil and permafrost conditions, water drainage, and winds.

2. Land for resource exploitation. mining, timber growing and logging, fish and game use, tourism, reindeer or stock grazing, farming, sand and gravel beds.

In most cases there is little choice of where these activities could go on, in comparison with the different locations often available for building. Mines, fish runs, tourist attractions, stands of timber, and gravel beds are where they are, not necessarily where we want them.

3. Land for open space recreation. Community open space recreation areas and facilities can serve lots of recreational uses by using many different natural features (lakes, riversides, beaches, woodlands, mountain meadows, etc.) either as they are or with small developments such as trails, shelters, and so on. Most communities in Alaska have many possible recreation areas. Few have protected or developed them.

4. Lands for beauty, and historic settings, whose main purpose is to show and add to the “personality” of a community and to increase the pleasure of living in it.
5 Land for revenue. Communities with taxing and spending powers usually can obtain public lands as investments, to be leased or sold to private individuals at a profit.

These needs for land and land resources by communities cause a variety of problems. Solutions can best be found through cooperative planning.

Following is a list of goals in land use planning.

1 Prevent land from being used for purposes for which it is poorly suited. An example would be where a community decides not to allow home construction in an area that is flooded every few years. This type of planning protects a person from a personal disaster, and prevents unnecessary costs or tax losses to the community.

2 Do not allow uses that have very damaging side effects on other land uses. A riverbank gravel pit that changes normal river currents and causes erosion of nearby property, would be an example.

3 Prevent “leapfrog” homebuilding or commercial construction where houses are scattered far from community centers and community costs for fire and police protection, water supply and sewage collection, and school bus services will be raised.

4 Try to prevent arguments and lawsuits between land users with different needs.

5 Protect important and good uses of land which cannot compete economically (or politically) with commercial, well-organized groups. Subsistence users of berry, fish, game, and timber resources often need such protection in Alaska.

6 Decrease community costs, increase tax and other revenues.

7 Help achieve the way of life residents want.

8 Attract new people.

9 Obtain state and federal funds for various community health, recreation, and economic projects, which often are available only when there are community land plans and planning groups.
Notice that the first five functions of land use planning are to prevent great costs to communities and to prevent environmental damage. These are the defensive functions of planning, and they are interrelated with the last four goals aimed at progress.

**Special Problems of Alaskan Land Use**

The cold dominated environments of Alaska have special characteristics which decide uses made of the land. Also, Alaska’s history and economic conditions affect land use, which planners must take into account. The most important of these environmental, economic, or governmental conditions are worth mentioning here.

The major environmental problems of land use at the community level relate to (1) small amounts of plant and animal life, (2) permafrost and other soil conditions, (3) water supply, (4) water erosion and flooding, (5) waste disposal, and (6) air pollution.

Though many tourists to Alaska come with ideas of wildlife in great numbers, Alaskans know that most of the State has very low population of wild animals because of the low production of plants which the animals eat. There are many local and seasonal exceptions to this rule. Many rural settlements were built to take advantage of wildlife concentration points, caribou migration routes, good fishing areas, waterfowl breeding marshes and migration routes, and marine mammal hunting areas. When people move to larger communities like Bethel, Nome, and Barrow, to take advantage of jobs, schools, or hospitals, the number of people can become greater than the amount of local wildlife to provide for their needs. Alaskan villages sometimes move. They may find poorer hunting and fishing opportunities, or they may improve their subsistence opportunities if their planning has been good. Settlements located near good hunting and fishing areas may also be able to develop charter, guiding, and other businesses serving sportsmen.

Soil conditions, especially permafrost, can be a major factor determining land use in the North. Permanently frozen ground near the surface can be good, providing a solid foundation for buildings, refrigeration, and keeping water near the top of the ground where it is available for plants. Permafrost can also be a hazard, especially if it melts when you do not want it to, after road, pipeline, or building construction. Other soil types common in Alaska also
present special land use problems. Well known examples are, silty soils of the Interior, which erode easily and do not compact well after being dug up, clay like soils in earthquake prone areas such as those which slid into Cook Inlet in the 1964 earthquake, and soggy, muskeg soil of southeastern Alaska.

Water supply problems plague a surprising number of Alaskan communities, big and small. The causes of water shortage are many.

1. Kodiak’s water shortage is caused by very wasteful use by canneries. The town either must build a new reservoir or require industry to use less water, or both.

2. Ketchikan’s problem is with a poorly designed dam which failed during a storm. Like many other southeast Alaskan communities, Ketchikan is in an area of shallow, porous soil where rainwater disappears quickly. When the sun shines for a few weeks (as it does once in awhile!) a lack of water results.

3. Point Hope and Wainwright have problems common to communities built on beaches. Salt water surrounds the town on two or three sides and seeps into the old beach gravels under the communities. Fresh water from a river is available in summer, but is expensive to carry in small motorboats. Old sea ice can be used in winter. Shallow freshwater ponds can supply water in summer, but are hard to keep pure.

4. Barrow simply grew too fast, and ran out of drinkable water.

Erosion and flooding are real problems in many communities, including some that have seasonal water shortages. The location of communities above high-water limits is necessary for most riverbank communities in interior Alaska because of yearly flooding during spring break up. The same is true of many coastal tundra villages where storm tides flood far inland across the low, level ground. Chevak, Old Minto, and Emmonak are three of many villages forced to move from flood prone areas. Fairbanks is a town which should never have been built where it is, on the floodplain of the Chena and Tanana Rivers. The cost in flood damages and flood control structures is now obvious to everyone.

Wastes of all sorts—industrial wastes, sewage from homes, garbage, and used equipment and vehicles, to name a few—are hard to get rid of in the North.
The problem is both ecologic and economic. Wastes do not decompose very fast in the cold Alaskan climate. Many disease organisms in sewage live for years in soil and ponds. On the economic side, the fact that waste metals, paper, and other reusable materials are scattered in heaps all over the State, and the high cost of shipment to recycling centers, make it expensive to dispose of these materials properly. All of the common techniques for waste disposal such as locating dumps, burning garbage, and putting in sewage lines, lead to land use problems.

Alaskan towns often are located in sheltered areas and valleys where there is little wind. Fairbanks, Juneau, and Anchorage all have air pollution problems (1) because of periods of still air, and (2) because of the amount of pollutants being poured into the air. Many other communities would have air pollution problems if there were more homes, cars or industries. Communities must plan to prevent air pollution when they build airports, housing, industrial plants and garbage dumps.

Economic factors of land use are related to environmental characteristics. High costs of labor, equipment, and materials mean that land uses where big changes must be made are often impractical. For example, treeplanting, forest fertilization, and brush control, all commonly done outside of Alaska as part of tree farming operations are too costly in Alaska. So loggers must wait longer to get a second timber crop in southeast Alaska. This lowers the income from forests, and may influence land use decisions.

High labor and other business costs keep many Alaskan products from being competitive in price even in Alaskan markets. This is why West Coast lumber is all one can find in retail lumber yards in the timber country of the Alaska Panhandle. Likewise, it means that practically all of Alaska's crude oil is shipped south for refining, while Alaskan consumers use gasoline and stove oil from California.

Governmental problems also affect Alaskan land use and land planning. The two main ones are problems of land ownership and lack of planning authority.

Before settlement of Native land claims practically all Alaskan communities were surrounded by government land owned either by the federal government or the state. This meant that the uses of the land right around villages were decided in Washington, D.C. or Juneau and carried out by field offices in Anchorage, Juneau, or Fairbanks. The ways in which the land was used
Sometimes was in conflict with local needs (defense areas, dam sites, refuges, parks). The 1971 Native Land Claims Settlemnt Act changed this situation quite a bit. Nevertheless, state and federal agencies always will control some 85 percent of Alaskan lands, at least some of which will be needed for community uses. The problem of cooperation between local and state federal landowners will continue.

On the other hand, both the federal and state governments have long had programs of giving land to private individuals, so that individuals may control land useful to the community as a whole. Mineral claims, homesteads, homesites, recreation sites, and Native allotments are common examples. Local land planners must cooperate with or "buy out" these individuals when important pieces of land are involved.

The third ownership problem is a cause of confusion and delay in community land planning. This is the fact that land ownership in Alaska is in such a state of change. Land now in federal hands might soon be given to a village of Native Regional Corporation under the Land Claims Act, but as yet no one knows exactly how much land, or which lands. The state has spoken for about 65 million acres of federal land, and may select another 40 million acres between now and 1984 under terms of the Statehood Act. Certain tidelands and submerged (offshore) lands are claimed by both the state and federal governments. Within the federal bureaucracy there will be major shifts or "trades" of land between various agencies. In short, Alaskan communities often do not know who their neighbors will be.

Alaska Native Claims Settlement Act. Influence on Community Planning

The Alaska Native Claims Settlement Act puts about 220 communities and 12 Native Regions squarely into the business of land use planning on a very large scale. Regional and village corporations will have 40 million acres of land and resources to plan for. The monetary settlement in the Act (increased, it is hoped, by income from corporate investments) provides money to plan with. Planners must consider the needs and desires expressed by Natives, presently numbering some 53,000, to develop goals.
Before looking at some of the planning opportunities made possible by land
claims settlement, it would be wise to look carefully at the three ingredients
of land planning just mentioned: land, capital, and goals.

The amount of land now owned by Alaska Natives—an area only slightly
smaller than the state of Washington—means very little. What matters is what
assets the lands contain. This is where the land-settlement loses some of its
rosy glow. Most villages will not be able to meet their needs for sand and
gravel, timber, wildlife, or water (to name only a few basic resources) within
their allotted lands. Their land base will have to be made larger by joining
lands with neighboring villages or with the regional corporation, or by
obtaining permits to use resources on state or federal lands nearby.

The capital, like the land, will certainly be far less than is needed to provide
for everything people want to see done. Capital controlled by Native
corporations will have to be multiplied by means of grants, loans, partnership
arrangements, and other seed money techniques. The difficulty is that all such
investments of money carry a big risk. Native corporations may lose some of
their power as they share in investments with other groups.

Regarding goals of Natives, a third important planning ingredient, it is not
hard to show that Natives are no more single-minded than any other large
group. One of the biggest differences in goals among rural Natives is that
some place great importance on the need to project subsistence resources
(fish runs, timber for camps and cabins, wildlife resources, berry patches)
while others are interested in selling resources for cash. Sometimes both goals
can be achieved through careful land use planning, but sometimes they
cannot. The basic problem, in cases of argument, is that the people who lose
the subsistence resources rarely get the money from selling natural resources.
They are not given anything to make up their loss. The opposite is also true.
if subsistence resources are protected by allowing chances to sell resources at
a profit to slip by, the potential businessmen are not given anything for their
losses.

Although the Act clearly provides an opportunity for good land planning by
Alaskan villages, it does not explain how the planning is to be done. The job
is left in the hands of the villages and regions. They are faced with a
frightening number of planning groups with some authority over them. Or-
ganized boroughs have land planning authority for all except state and
federal land within their boundaries. Incorporated cities also have planning
powers. State planning is done by the Planning and Research staff in the
Office of the Governor, and by various departments, especially the Department of Natural Resources, Department of Community and Regional Affairs, Department of Highways, and Department of Environmental Conservation. An even greater variety of federal agencies has planning functions affecting community growth and development.

The Alaska Native Claims Settlement Act set up a joint state and federal body to study land-related problems and make recommendations to Congress and the state. This group, the Joint Federal State Land Use Planning Commission, is required by law to study the special problems of land use in Native villages and regions. One member of the ten-member commission must be a Native. The commission met first in August 1972, and within weeks had begun careful study of land problems of Native Alaskans after hearing about the problems from Native organizations. Though the Commission can only advise, not act, it may become a valuable way for Native communities and regions to discuss their problems with state and federal representatives at the same time.

**SUMMARY**

Small Alaskan communities need to develop strong land use planning programs because (a) communities are growing, and changing their basic economy and society, (b) every piece of land has a different range of possible uses and use limitations, and (c) different people have different land-related needs.

Land planning is a continuous process. It attempts to fit people's needs with what the land can do. As community goals change, as the land itself changes naturally or because of human use, and as unexpected things happen, land planning programs must change. Land planning is successful if it helps people figure out their needs and desires, develops ways in which the land can meet the many demands placed upon it, prevents the destruction of land values, and protects individuals and communities from costs they cannot pay.

Alaskan communities must work with special environmental conditions of the North. One of these is the low production of plants on northern lands. Another is the shortage of usable water in some places. Still others are natural conditions which lead to pollution, the nature of several Alaskan soil types, and permafrost. Economic factors are important, too, in determining what it is possible to do with Alaskan lands.
Governments' authority over community land planning is unusual in Alaska too. Communities cannot plan for their own needs without cooperating (and sometimes arguing) with borough, regional, state, and national planning authorities. Communities rarely have land enough to be self-sufficient. They must depend on other landowners, public and private, to provide certain land resources and allow certain community activities. Especially since passage of the Alaska Native Claims Settlement Act in December 1971, confusion and unsolved questions have come up relating to who will control specific areas of land, how land use planning will be handled by different levels of government and how workable land use patterns can be arranged with so many competing interests. The challenge for community planners is to figure out local needs well and to explain and defend these needs effectively in regional and statewide planning efforts.

Bob Weeden
Professor of Wildlife Management
University of Alaska
<table>
<thead>
<tr>
<th>TERMS</th>
<th>Description</th>
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<tbody>
<tr>
<td>OIL POLITICS</td>
<td>the political activities of all of the groups interested in oil</td>
</tr>
<tr>
<td>ECONOMIC RECESSION</td>
<td>a period of time when unemployment is high and people are not spending as much money as usual.</td>
</tr>
<tr>
<td>INFLATION</td>
<td>a condition of the economy where money does not buy as much as it did just a short time ago.</td>
</tr>
<tr>
<td>TREE FARMING OPERATIONS</td>
<td>planting of trees to be cut and used later</td>
</tr>
<tr>
<td>MONETARY SETTLEMENT</td>
<td>an amount of money paid for rights on something</td>
</tr>
<tr>
<td>CORPORATE INVESTMENT</td>
<td>property bought by a corporation to make a profit for stockholders</td>
</tr>
<tr>
<td>CAPITAL</td>
<td>money, equipment, and building which a company has</td>
</tr>
<tr>
<td>SEED MONEY</td>
<td>money which is used to make more money</td>
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</table>
QUESTIONS

1. Has your community grown physically in the last five years? List the physical changes you've seen.

2. Try to figure out all of the reasons for each change.

3. Imagine that you are about to build a home or a business. Dream about the perfect place, picture the land, water, climate, soil, animals, and natural resources you would have around you.

4. Now imagine that you can build on any piece of land in your town. Where would you build, what would you build, and why?

5. What land around your community has resources which might be used? Describe how you would develop a business exploiting a resource if you had the money.

6. Consider how your business would affect the people in your town who are subsistence hunters and fishermen.

7. What land or water around your town might be used for recreation? Who would use it?

8. In what way would recreational use disturb the ecology of the area?

9. Think back to the business you were starting in No. 5. What equipment would you need, and what skills? Who could you hire or go into partnership with, to help you?
GROUP DISCUSSIONS

1. Why was your town built where it is?

2. What are the physical assets of the land? What are the liabilities?

3. Is there a place in your community that has a lot of history about it that you would like to see saved?

4. Is there a place near the town that is so beautiful that you wish it could be left the way it is?

5. Is anyone trying to change the places you thought of in No. 3 and No. 4? If your places are in danger, who can you go to for help?

6. Who in your community knows about taxing land? Ask him to explain how it works.

7. Look at the list of goals in land use planning. Imagine that you are members of the city council. What laws would you pass to improve land use planning in your town?

8. What kinds of pollution does your town suffer from? What can be done about them?


10. Set up a debate between those who are in favor of economic development of some land around your town, and those who are in favor of leaving it alone (subsistence or ecological reasons).