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Thesis Prospectus - First Draft

Environmental Issues in the European Alps and Transnational Organizations

- I. Major Problems Facing the Alps
- II. UNESCO of the United Nations
- III. European Environmental Agency of the European Union
- **IV.** Alpine Convention
- V. Alpine Space Program
- VI. Comparisons and connections

The Alpine ecosystem of the European continent represents a diverse and vulnerable center of biodiversity and natural water management. Erosion, increased contamination of water due to tourism, and rising temperatures are only a few of the issues that threaten to destroy the Alps. Global climate change caused a significant increase in average temperatures in the Alps in the past century. Also, precipitation patterns were severely altered due to global warming. Several important water resevoirs of Europe including the Danube, Rhine and Rhone Rivers as well as smaller lakes and tributaries receive water from the Alps . Large amounts of water are stored as ice in glaciers, lakes and soil of the Alps during the winter that melt in spring and summer to feed many of Europe's most important rivers. The Alps are commonly referred to as the "water towers" of Europe because of the large reservoir of fresh water held in Europe's largest the mountain range. Increasingly variable temperatures and precipitation trends, however, have altered the flow and water quality of rivers that depend on the Alps. Decreased or extremely variable drinking water supply and border changes due to melting ice are only two of the problems that could lead to international conflict within Eurasia because of the effects of global

warming in the Alps. The Matterhorn in Switzerland is a perfect example of the effects of melting permafrost in the Alpine regions.

Because of the practical and aesthetic value of this unique natural resource, all levels of society, from transnational organizations to grassroots community campaigns, have become concerned with the conservation of the Alps. What measures are being taken to ensure the preservation of one of the most beautiful and most important mountain ranges on Earth? What is being done to combat these problems? Who is responsible for efforts towards reducing the changes brought on by global warming in the Alps? How are the strategies used by different groups similar and how are they different?

The overwhelming problems brought on by global warming have caught the attention of various groups concerned with conservation. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) is a branch of the United Nations formed in 1945 that attempts to promote peace and security through appreciation of culture and the pursuit of knowledge. One way this goal is achieved is the preservation of historical sites with innate scientific or cultural value. The Jungfrau-Aletsch-Bietschhorn region of the Swiss Alps was placed on the UNESCO World Heritage list in 2001. The site in the Swiss Alps is considered intrinsically valuable because of its natural beauty, rich biodiversity and the scientific studies of climate change, mountain ecosystems and water issues the area offers. According to UNESCO, the Jungfrau-Aletsch-Bietschhorn region is the most glaciated part of the European Alps. The preservation of the scenic beauty of the region is also at the top of UNESCO's priorities as much European literature, art mountaineering and tourism came from and depends on the beauty and continued presence of the ecosystem. It also offers a perfect example of the process of mountain building over millions of years. Also, the flora and fauna of the region are important to international biodiversity and scientific research. The region is under legal protection and managed by UNESCO as well as federal and cantonal governments. Key issues for the management of the World Heritage Site include the future impact of climate change, creating sustainable tourism practices, and the need for coordination between different entities of protection.

Another international organization that values the European Alpine ecosystem is the European Union's environmental branch known as the European Environmental Agency (EEA). The EEA focuses on five major areas of environmental issues: air pollution, biodiversity, climate change, land use, and water. The agency's main goal differs from that of UNESCO's and concerns presenting independent information on the environment to policy makers who are responsible for planning and implementing environmental policy as well as the general public and independent groups concerned with the environment. The EEA briefly outlines the major problems in the Alps on its website and more thoroughly in the informational research study entitled "Regional climate change and adaptation: The Alps facing the challenge of changing water resources." The information offered by the EEA focuses on more personal stories and widespread disturbances that would be easily noticed such as the 2003 heatwave, increased contamination of water supply headed for cities like Vienna, and the disappearance of glaciers visible while hiking the Matterhorn in Switzerland. Increased cooperation between European nations is necessary to combat environmental issues, and the EEA strives to present the information that is necessary to realize the need to make changes.

The Alpine Convention is a framework agreement between the nations effected by climate change in the Alps: Germany, France, Italy, Slovenia, Liechtenstein, Austria, and Switzerland as well as the European Economic Community (EEC). The framework entered into force in March 1995. The Alpine Convention is similar to the European Union with its rotating presidency between member nations as well as a Permanent Committee that ensures the measures planned by the Convention are implemented. The Alpine Convention's main focus is the area of the Alps. The primary goal of the organization is to develop strategies to alleviate problems in the region. There are many similar agreements between nations and smaller community entities within the Alpine regions whose goals are more about getting real results to insure the preservation of the way of life of those who live in and depend on the Alpine region through using new strategies as opposed to collecting information.

Another transnational group dedicated to cooperation in the Alps is the Alpine Space Program

created by the European Union under the European Territorial Cooperation 2007-2013. During this time interval, €130 million will be invested in the sustainable development of Alpine regions and different projects focused on finding and implementing solutions to the problems faced by the Alps. The three main priorities of the Alpine Space Program are maintaining and promoting competitiveness and attractiveness of the region, the improvement of accessibility and connectivity through reliable transport systems, and finally the protection of the natural beauty and resources afforded by the Alpine space and coping with environmental problems. The Alpine Space Program funds several smaller, grassroots organizations such as AdaptAlp and Alp-Water-Source. The ASP is more concerned with small, community-oriented programs that address a wider variety of issues in the Alpine region as well as cooperation between different nations and communities. I will focus on one or two of these programs concerning the third priority of environmental issues in the Swiss Alps.

From the United Nations to community-oriented projects organized by groups such as AdaptAlp, action is taken at all levels of European society to present information about environmental issues in the Alps and combat these problems before one of the most important and beautiful ecosystems of the planet is carelessly ruined. The different agencies and initiatives I have outlined serve various purposes and goals. I hypothesize that grassroots initiatives are more productive in combatting problems than larger bureaucratic entities. I do believe, however, transnational cooperation is at the heart of saving the Alpine ecosystem for future generations.

## Methods

My thesis will be divided into six chapters as seen in the outline above. The first section will be a brief overview of the issues in the Alps using the Matterhorn in Switzerland as an example of problems. The following four chapters will outline the history of different agencies and how they contribute to the environmental improvement of the Alpine region. Lastly I will compare how these agencies function and alleviate problems.

The agencies that I have chosen to examine have created extensive research into the changes of the Alpine ecosystem due to global warming. The websites of these agencies as well as news sources concerning the Alps and the agencies work in the region will be my main informational sources. Also, reports written about environmental issues in the Alps such as the EEA's 2009 study entitled "Regional climate change and adaptation: The Alps facing the challenge of changing water resources" will be important pieces of my research. There is a plethora of literature and data analysis concerning the climatic issues in the Alps. I will go more into this in my Literature Review that is due on October 18th.