KEEPING WILDERNESS WILD: THE IMPORTANCE OF WILDERNESS MANAGEMENT Katie Spires*, @katiespires1, Program on the Environment, University of Washington Site Supervisor: Erica Keene, United States Forest Service, Region 6 Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

The Wilderness Act of 1964 mandates that Wilderness must be protected and managed to maintain natural characteristics. As Wilderness areas are increasingly used, human impacts are more noticeable and detrimental. The purpose of this study is to determine the degree of human impact in the Buckhorn Wilderness, located in the Olympic National Forest, and to explore management solutions to perennial problems like impacts from campsites and improper human waste disposal. To accomplish this, I worked with the United States Forest Service (USFS) to gather quantitative data on recreation sites and participated in public engagement about human waste disposal. In concurrence with gathering data and public engagement, I conducted a literature review and administered a survey assessing visitor waste disposal habits and knowledge. My results indicate that there may be some signs of crowding, like the abundance of low-impact campsites, and that the USFS should continue waste disposal education using Leave-No-Trace principles, but also provide privies at the busiest campsites. Eventually, a visitor quota may be implemented to reduce overall impact from campsites and feces. Additionally, visitorranger interaction is a powerful tool for education and persuasion and should be present at busy trails, trailheads, or campsites during the busiest times. This project demonstrates the importance of Wilderness management, defining standards, and monitoring in the protection of Wilderness. Effective management is crucial to fulfill legal mandates as well as make these wonderful places as accessible as possible.