International Trip Report

Instructions: Use additional pages as necessary. One report may be submitted by a group traveling to the same location. Reports must be transmitted to the Management Entity within 15 days of return to the United States.

Traveler(s): Tracy J. Baldyga

Departure and Return Dates: July 7 through August 15

Location(s): Njoro, Nakuru, and Nairobi, Kenya

Purpose of the Trip: Objectives for this trip were twofold: 1) complete land cover assessment to aid in classifying 8 remotely sensed images of the Njoro watershed and surrounding area and 2) assist in completing soil survey to quantity soil spatial distribution. All data collected is for use in a hydrologic model being developed to understand the hydrologic impacts of land cover changes over the past three decades.

List of Persons Contacted: <u>Please see attached list of participants.</u>

Brief Summary: (include technical observations, suggestions and recommendations, and overall impressions of the site situation if appropriate. Use additional pages as necessary.)

July 7: Depart Seattle, WA for London

July 8: Arrive in London and layover for flight to Nairobi, Kenya.

July 9-11: Arrive in Nairobi, Kenya and stay at Barbie Allen's home until Dr. Scott Miller arrives July 11.

July 12: Drive from Nairobi to Egerton University. Meet with Dr. Miller and Kenyan research scientists to begin reviewing work to be completed during the following weeks. July 13: Continue planning field work visits, including obtaining watershed maps and map detailing soils work completed to date.

July 14: Assess flume and agroforesty sites in watershed with Drs. Scott Miller, William Shivoga, Charles Gichaba and Mr. Francis Lesingo. In the afternoon received direction from Dr. Miller regarding flume sites and areas to visit in the watershed where appropriate sites may be located.

July 15: Traveled into the watershed with Drs. Gichaba and Sian Mooney and Mr. Lesingo to scout appropriate locations for flumes. This task included writing detailed area descriptions, drawings and photos. Some stakeholder interaction involved with assistance from Mr. Lesingo to discuss possibility of using occupied farm land for at least one flume site.

July 16: Continued meetings with Kenyan researchers to discuss following week's research. Generated land cover assessment data collection sheets and worked with project driver to begin planning land cover data collection. This included determining how many sites could be accessed in a day as well as planning data collection with regard to climate in the area (i.e. rains falling heavily in the upper watershed during the late afternoon).

July 17: Travel to Maasai Mara with Dr. Sian Mooney.

July 18 – July 20: Travel to Lake Bogoria for SUMAWA retreat. Work with fellow researchers to develop research plans for activities to be completed during the following year. Gave presentation detailing research I have completed during the past year, including preliminary land cover assessment and preliminary hydrologic model simulations results.

July 21: Met with Dr. Miller and Master of Science candidate Zachary Gichuru to review soils work completed and additional soil work needed to appropriately quantity soil spatial distribution within the watershed. This included selecting days for soil work and locating areas in the watershed where more soil data is needed. This included discussions over accessibility in the upper reaches (i.e. indigenous forests primarily) and hiring people to assist in digging soil pits. At least 10 more soil pits were needed to complete the soil mapping, but only 4 days would work with schedules for researchers involved. As such, soil pit locations had to be planned for greatest efficiency accounting for weather and accessibility.

July 22: Land Cover Assessment Data Collection (Egerton to Logomon: AM; Egerton, Njoro to Nakauru: PM).

July 23: Land Cover Assessment Data Collection (Upper watershed, Likia side: AM; Ngata settlement, Lake Nakru area: PM).

July 24: Office day to review data collected over previous days. Included setting up spreadsheets for data entry to input to eventual GIS that will be used in the land cover classification process.

July 25: Dr. Miller departs; continue archiving field data from previous days.

July 26 – July 27: Dr. Marion Jenkins arrives; Land cover data collection with a continuing data collection pattern that accounts for the afternoon rains: data collection in the upper watershed above Nesuit in the morning and data collection in the lower watershed in the afternoon.

July 28 – July 29: Begin working with Zachary Gichuru on soil data collection. Three plots were described each day and all were in the upper watershed above Logoman and collected in Indigenous and Plantation forests.

July 30 – August 1: Visit Maasai Mara with fellow researcher Laura Thel. August 2: Land cover data collection with a continuing data collection pattern that accounts for the afternoon rains: data collection in the upper watershed above Nesuit in the morning and data collection in the lower watershed in the afternoon.

August 3: Land cover data collection in the morning in the upper watershed. During the afternoon did routine maintenance on SUMAWA student computers, including writing instructions on how to clean up the computers and defragment hard drives to improve computer speed and efficiency.

August 4: Spent the days working in the SUMAWA offices continuing to archive data collected over previous days and plan filed visits for upcoming week. This included data entry and reviewing land cove photos to ensure proper land cover classification.

August 5: Work with Zachary Gichuru on soil data collection. Three plots were described in the Logoman area and collected in Indigenous and Plantation forests.August 6: Visited Lake Nakuru to collect land cover data, in particular where wetlands are located in the park.

August 7: Spent the days working in the SUMAWA offices continuing to archive data collected over previous days. This included data entry and reviewing land cove photos to ensure proper land cover classification.

August 8: Spent the days working in the SUMAWA offices continuing to archive data collected over previous days. This included data entry and reviewing land cove photos to ensure proper land cover classification.

August 9: Final day for soils collection. Described three more soils plots and revisited a previous soil plot to retake photos of the plot and surrounding area.

August 10: Final day for land cover data collection. We visited the lower watershed around Nakuru for land cover data. During the afternoon we visited the Agroforestry center near Egerton University where we were able to learn about farmer outreach in the area and learn more about trees and shrubs being cultivated in the nursery and distributed.

August 11: Final day working in the SUMAWA office. I photocopied any reports that may be pertinent to completing the hydrologic modeling, such as groundwater study information and biodiversity data. Made CD of soils data collected for Gichuru and met with him in the evening to review how the data was input to spreadsheets for future use in a GIS.

August 12 – August 14: Personal time spent at Samburu National Reserve.

August 15 – August 17: Depart Nairobi on August 15 and layover in London until August 18 departure.

August 18: Return to Seattle, WA.

Signed _____

Date _____