



JOB DESCRIPTION

Position:	Geographical Information System (GIS) Officer
Position Type:	Full-Time
Duty Station:	Kampong Thom Province, Tonle Sap Landscape Office
Expected travel:	WCS's Tonle Sap Landscape (Kampong Thom, Siem Reap, Banteay Meanchey, Battambang, Pursat, and Kampong Chhnang)
Reports to:	GIS and Remote Sensing Specialist, Program Manager, EU's Project Lead

Organization Background:

The Wildlife Conservation Society (WCS) is a US non-profit, tax-exempt, private organization established in 1895 that saves wildlife and wild places by understanding critical issues, crafting science-based solutions, and taking conservation actions that benefit nature and humanity. With more than a century of experience, long-term commitments in dozens of landscapes, presence in more than 60 nations, and experience helping to establish over 150 protected areas across the globe, WCS has amassed the biological knowledge, cultural understanding, and partnerships to ensure that vibrant, wild places and wildlife thrive alongside local communities. Working with local communities and organizations, that knowledge is applied to address species, habitat, and ecosystem management issues critical to improving the quality of life of poor rural people whose livelihoods depend on the direct utilization of natural resources.

Program Overview:

The Tonle Sap Landscape consists of several sites that taken together represent all the major habitats in the Tonle Sap Lake and floodplain. These sites support some of Cambodia's most threatened bird species, as well as other species of conservation concern. They are also vital habitats for fish, which provide food to local people who also depend on rice. In the Tonle Sap Landscape, the Wildlife Conservation Society (WCS) works in partnership with the Ministry of Environment, the Fisheries Administration, the provincial administrative, NGO partners, and local communities to implement biodiversity monitoring and law enforcement across the landscape. The project adopts an integrated landscape approach to strengthen resilience to environmental change in ecosystems, communities, and biodiversity to ensure sustainable natural resources management and local livelihood improvement.

In the Northern Tonle Sap Protected Landscape, Kampong Thom and Siem Reap Provinces, and Bakan Protected Landscape, Pursat Province, WCS aims to conserve the Critically Endangered Bengal Florican and other globally threatened species in a network of protected floodplain and non-breeding sites. At Ang Trapeang Thmor Protected Landscape, Banteay Meanchey, WCS aims to protect an important non-breeding season concentration of Sarus Cranes, Eld's Deer, and many waterbird species in the freshwater wetland habitat. And at the Prek Toal Ramsar Site, Battambang, WCS support MoE and PDoE to protect the largest waterbird colonies and south-east Asia and the flooded forest and support the Fisheries Administration, and Community Fisheries on the fisheries monitoring and conservation at Prek Toal Fisheries Conservation Area and Siem Reap Fisheries Conservation Area.

Purpose of Position:

The GIS officer is responsible for providing technical support for digitizing, manipulating, querying, and developing visualization maps of protected areas, biodiversity and habitat monitoring datasets, and overall project beneficiaries using GIS tools and techniques to support law enforcement teams in

the Tonle Sap Landscape. The selected candidate will work closely with GIS and Remote Sensing Specialist to support the zoning team to feature and develop zoning maps from the sketches to the final products (raster and vector data) and support the biodiversity team and law enforcement team to develop geographical-based biodiversity monitoring plan and tackle land use and land cover change for informing and improving law-enforcement effort, support SRP and Live livelihood team to provide overall technical support on land registration and beneficiary distribution maps. This position will work closely with the landscape manager, project leads, site coordinators, and other landscape members under direct support from GIS and Remote Sensing Specialists to ensure that the assigned tasks are achieved.

Specific tasks and key responsibilities:

1. Digitize, collect, manage, and update all spatial data from respected project areas to the geospatial dataset for activity planning and reporting materials.
2. Use a range of field survey methods such as GPS and GIS tools for data collection to develop geospatial databases including land use and land cover, biodiversity and key habitat types, protected area, and zonation.
3. Support project staff at each target project site to use the Fire Information for Resource Management System (FIRMS) for observing and responding to forest fires across the landscape.
4. Support the Remote Sensing specialist in responding to the monitoring of habitat changes particularly flooded forests, and grassland by using GIS and Remote Sensing technologies.
5. Work closely with GIS and Remote Sensing Specialists to Assist the project team and liaison with government partners to develop mapping material for the protected area zonation processes, boundary pole decoration, CPA establishment, anti-forest first management plan, and biodiversity monitoring plan.
6. Support the Sustainable Rice Platform (SRP) team on the land tenure data collection and registration process by using GIS software, SMART Mobile, Kobo Toolbox, and other relevant software.
7. Assist and provide training to field staff as required by the project and line managers.
8. Work closely with the SMART team and government counterparts to develop monthly patrol plans.
9. Develop project technical reports and monthly reports as needed.
10. Perform other tasks assigned by line managers.

Minimum qualifications and experience:

1. Bachelor's degree (master's degree is desirable) in land management, geoinformatics system, natural resource management, environmental science, biodiversity conservation, agriculture, forestry, computer science/software engineering, or a related field.
2. Minimum of 4-year experience working in applying GIS tools and techniques for conservation, biodiversity monitoring, and/or land use management.
3. Experience working with GIS software such as ArcMap, ArcGIS Pro, Web-based applications, and Q-GIS, familiar with Remote Sensing technology and Google Earth Engine.
4. Experiences in data collection and survey using Drone, GPS, SMART, Kobo Toolbox, QField, and other related tools.

5. Good understanding of wildlife conservation, protected area management, fisheries management, land use management, Environmental Code, Forestry Law, Fishery Law, Land Law, and Protected Area Zonation Guidelines.
6. Excellent interpersonal ability to work independently and as part of a team.
7. Good in English and fluency in Khmer.
8. Good analytical/problem-solving, report writing, and critical thinking skills.
9. Keen to work under pressure, handle multiple tasks, and meet multiple timelines and assignments simultaneously required.
10. Be able to work in remote areas and over-nights in the field with regular travel by boat, motorbike, and foot if needed.
11. Maintain excellent communication with the project team, partners, and stakeholders to achieve project goals and objectives.
12. Good Computer skills and Microsoft Office (Ms. Word, Excel, PowerPoint, and Email).
13. Strong interpersonal, teamwork, and presentation skills.

Outputs:

- Monthly activity plan
- Monthly progress report, six-month progress reports, special study report, field technical reports
- Completed project/landscape geodatabases.