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| VIU acronym_and text | | **Advanced Diploma in GIS Applications**  **Practicum Opportunity Summary** | | |
| Project | Title: | Species at Risk Attribute Updates | | |
| Organisation: | Natural Resources Canada, Pacific Forestry Centre | | |
| Location: | Victoria | | |
| Sponsor | Name: |  | Title: | Federal Lands Natural Resources Specialist |
| Email: |  | Phone: |  |
| Project Overview | The Federal Lands Program at Pacific Forestry Centre assists some other Federal departments with managing natural resources on lands under their jurisdiction. We administer natural resources spatial data for 20 Federal properties in coastal BC.  We have a number of Species at Risk (SAR) feature classes that we would like the attribute tables updated for. There is a new standard for submission of SAR data, and the goal is to align existing attribute data with that standard. The standard is a fairly complex relational GDB, but most of the relevant fields can be adapted to work with flat files. | | | |
| Task Summary  (Types of work involved) | The primary work of updating the SAR attributes will include:   * review the standard and what we have come up with so far for a flat version of it. If the student was keen on relational GDBs, they could spend some time reviewing the data that a contractor has converted to the relational standard and flagging errors in how the attribute data were converted * finalize a new attribute schema with sponsor * work with sponsor to figure out how to field map from existing data to the new attribute table. There are at least a couple of fields in the existing data that will require more complex work to separate the data into multiple fields in the new schema * implement the conversion * cartographic updates of existing SAR maps * prepare a report summarizing the work done, methods, and results   Time permitting, the sponsor has a number of other tasks/initiatives the student can be involved with. Such work may include:   * Red and Blue-listed Ecosystems data compilation and mapping: reviewing Conservation Data Centre statuses and making any updates required (in spreadsheet format & GIS feature classes); creating a series of maps to show red and blue listed ecosystems at a number of properties; and potentially prepare a narrative describing ecosystems at each property. * Researching DGPS solutions for their program: Sponsor has an old Trimble unit that is at end-of-life and needs to be replaced. Research options for new GPS hardware/software, based on sponsor requirements * Cartographic updates of other existing maps | | | |
| Additional Information  (Appealing Aspects) | * We would like to hire someone for a 4 month work term (employment would continue beyond the 9 weeks practicum project). * Work with a team of biologists, forestry officers, and technicians. See how we use natural resources GIS data for land management, including mapping critical habitat for endangered species and ecological restoration projects. Exposure to our GIS data and projects, and opportunity to explore areas of interest as time permits. * Possible opportunity to participate in field work at some of the subject Federal Properties (if interested). * Possible opportunity to meet GIS staff at Natural Resources Canada’s Pacific Forestry Centre. | | | |
| Funding | None  Minor (< $3,000)  Major (>$3,000) | | | |
| Workplace | Off-site  Full-Time On-Site  Other/Mixture  Description (if Other): Flexible. Either off-site or on-site, or a combination, depending on student preference. There is a possibility of fieldwork (day trips) depending on interest. Fieldwork would be based out of Victoria. | | | |
| Student Selection | Faculty Selection (Student with highest grades selected from among those interested)  Shared Selection (Faculty and Sponsor make selection based on discussion of interested students)  Sponsor Competition (Sponsor interviews, in-person or via telephone, and selects from interested students) | | | |

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