Legal Monitoring Procedure & Instructions

1. Prepare for Site Visit:

   - Get to know the site in advance
     - Review EDR and prior year LM report (and other earlier reports if appropriate)
       - Make note of any previously observed issues of concern
     - Be sure to read CE or DR (especially Purposes, Prohibited Uses, Reserved Rights)
     - Ask knowledgeable staff any necessary questions (e.g., best place to park and access the property or if there are any access problems needing attention prior to the visit – such as at Deerfield Blackgum Swamp back land) – you will also find directions to the site in the EDR
     - Plan site visits to monitor several abutting or geographically close sites in one day to make monitoring more efficient over all

   - Contact landowner in advance by phone and take notes on phone conversation
     - use the question prompts from the LM Form
     - invite the landowner to join on the monitoring visit

   - Study most current available aerial imagery to look for any signs of disturbance
     - If relevant, use observations to help guide your site visit
     - (If this is not done prior to visit, please be sure to do it after your visit, so that you can make appropriate notation in the LM Report)

   - Keep track of hours spent preparing to monitor, monitoring, and writing report; keep track of miles driven and any other costs (use a form or spreadsheet if helpful to keep track of this)

   - Gather field equipment
     - GPS and extra batteries
     - Camera with extra SD Card and extra battery (make sure that date is set accurately)
     - Previous year's LM Report
     - Map(s) & NH Atlas
     - Compass
     - Notebook
     - Ziplock bags (big & small) for notes and equipment
     - Field vest or back-pack (safety vest orange during hunting season)
     - Flagging
     - Personal effects (water; food; change of clothes/footwear if you are at a wet site; anything else you need to keep yourself safe and comfortable in remote locations)

2. Visit the Site:

   - Target any areas that have been problems in past, might be problems in the future, or that have not been visited recently

   - GPS your monitoring route

   - Photograph any changes or possible issues (do not overdo photos)
     - Be sure to observe and document the current condition of areas with previous issues
     - Take GPS waypoints of photo locations
     - Note direction of the photo taken

   - Take GPS waypoints of any other features that you consider useful

- Take notes on what you observe – this is important so that you can populate the Layer data in GIS when you download your points as well as complete your report.
    - In whatever way you decide to use GPS data, take note of the GPS point, and what data you would capture from that point
        - *(As an example, I let the GPS counter climb its automatic points, but then I write down the point number on my map, and note why I took that point:*
            - *#356 = derelict car*
            - *#357 = invasive multiflora rose (2 plants)*
            - *#358 = Photopoint A, at F&G ROW entrance*
                - *Photo 1, S35W, showing habitat management*
            - *#359 = Corner w/ IP*
            - *#360 = Corner at stone/wall & Photopoint B*
                - *Photo 2, N, showing abutter's encroachment*
                - *Photo 3, N42E, showing abutter's encroachment*

3. Process Field Data

- Download & Label GPS data into designated Legal Monitoring layers in GIS
    - Download GPS Data (using DNRGarmin or other software)
        - Select Waypoint and/or Track Tab; toggle appropriate data source to download Data Table, and Select relevant items to download
        - File/Save to/File (select "esri shapefile 2D" and name file appropriate place in designated folder)
    - Copy your field data into a Destination shapefile (which can be created by ***exporting*** Pete's data template into a new layer established to receive data)
        - *Start editing the new Destination shapefile*
        - *Rt. Click Source Layer; selection/select all*
        - *Rt. Click in View; copy*
        - *Rt. Click in View; paste*
        - *The following fields in the Layer should populate automatically from GPS data: IDENT, LAT, LONG, ALTITUDE, COMMENT*
        - *Save edits*
    - While still editing, populate data in tables with field notes. Consult with Pete and/or Krista with any questions and use nomenclature consistent with other records in attribute table, but in general use the following conventions:
        - *Enter SiteName and TractName as shown on the Legal Monitoring Form*
        - *Enter Legal_Int (CE or DR) (Can use "Field Calculator" to enter the same data into a large batch of records: selecting records, Rt. Click on Field Heading, use Field Calculator, and enter text in quotes (e.g., "CE"))*
        - *Put a Photopoint Label in Photopoint column if appropriate – otherwise leave blank*
        - *Put Photo Direction and Bearing data into those columns if appropriate – otw leave blank*
        - *If you have more than one photo from a given photo point, make extra copy(ies) of that point (do this by selecting the original record for that point; RtClk in View & Copy; RtClk in View and Paste; this should give you another record in your attribute table which you can then edit for the appropriate data for additional photos from that point – do this multiple times as needed for any given point)*
        - *Use Field Calculator to calculate LM_Date from COMMENT field*
        - *Enter LM_Staff*
        - *Use Label column to put any labels that you want to appear on the map beyond the photopoints (e.g., "Derelict Car" or "Multiflora rose") – otherwise leave blank*
        - *Enter Comments for **ALL** points (unless they are labeled as a photopoint, in which case you don't need a comment) – if you don't have a comment or photopoint label, then you shouldn't have a point (i.e., delete points without comments. This is the way to capture any other information that may be helpful now or in the future. One example is information on survey features or property*

corners. Try to be consistent with Comments – especially with things we might want to pull out later like survey features or invasives – so start those comments with those key words: (e.g., "Corner w/ IP" or "Corner at stone wall" or "Invasive: Barberry (~5 plants)")
        - *Save edits frequently; Stop editing when done*
    - When done entering all data into LM template, send data to Pete by e-mail so he can generate the map for you. Build in some time for him to incorporate into his work schedule – or coordinate schedules with him so you know when he will be able to produce your maps.

- Download & Label Photos using nomenclature: abbreviated sitename.LMDate.# (e.g., C&LBaker.LM2Nov10.A1.jpg). If there are supplemental photos, create a "Supplemental Photos" sub-folder for supplemental photos labeled accordingly (e.g., C&LBaker.2Nov10.IP1).

4. Complete Legal Monitoring Report – please do these within a month of the site visit (LM Interns should be sure to set aside time at the end of each month to complete reports for all sites visited that month):

    - Fill in relevant data into text that is italicized – please do not alter any non-italicized text.
        - Be sure to describe current condition of areas that contained issues noted in a previous report – be able to describe whether the condition is the same, better, worse, or totally remedied
    - Use relevant part of the form to note which aerial imagery you examined (source & date), and when you examined it (before the site visit or after).
    - Please do not alter document formatting or footers.
    - Please do not alter filename for document.
    - Please do not insert anything other than photos (& Pete-generated map once available) – any supplemental documents can be referenced and attached, but should not be part of the LM Report; and Pete will generate map and give it back to you to insert into the report.

5. Submit LM Report and Data:

    - Once you are done with the report, please put in a project sub-folder in (T:\Steward\LegalMonitoring\CurrentYearDrafts) and place in that sub-folder the following:
        - LM report (in Word)
        - Digital photos
        - Final GIS map
        - GPS shapefiles for tracks and waypoints
    - send Krista an e-mail saying you have completed this process and provide: ***total hours spent preparing, monitoring, and reporting; miles driven; any other costs***

Special note for Deed Restriction Monitoring

- Visit all Tracts due for tri-annual "boots-on-the-ground" in the current year
- Visit tracts with out-of-compliance problems noted in previous year
- As per new 2012 SOP requiring visual inspection for all tracts, for Tracts not due for tri-annual "boots-on-the-ground" visit, do drive-by; where road access is not available as noted on Great Bay LM map, use notations for easiest access for a quick visual annual inspection
- Include Monitoring for any relevant adjacent tracts – even if they are not on the actual rotation/schedule for the year (discuss with Krista if there are any question on this)