| Bumble Bee Survey Field Data Sheet | Unique Survey ID:               |
|------------------------------------|---------------------------------|
| Page of                            | Federal Recovery Permit Number: |

| Permittee/Surveyor<br>Name(s)                |  | E   | Email Address               |                          | Project Name                                   |            |                           | Site Name |                       |                          |      |   |
|--|--|-----|-----------------------------|--------------------------|--|------------|---------------------------|-----------|-----------------------|--------------------------|------|---|
|  |  |     |                             |                          |  |            |                           |           |                       |                          |      |   |
| Day Month                                    |  | ,   | Year Tempera                |                          | eture (F) Est. Wind Sp<br>(mph)                |            | eed Est. Cloud Cov<br>(%) |           | Cloud Cover           |                          |      |   |
| Protocol<br>Name<br>(from FWS<br>survey doc) | Transect<br>Length<br>(m) (if<br>applicable) | Wid | nsect<br>Ith (m)<br>oplic.) | Transect ID (if applic.) | Total<br>combin<br>time sp<br>surveyi<br>(min) | ent<br>ing | Sur<br>Sta<br>Tin         | _         | Survey<br>End<br>Time | Total<br>Survey<br>(m^2) | Area | Total Site Area (m^2) (including area not surveyed) |
|  |  |     |                             |                          |  |            |                           |           |                       |                          |      |   |

|     | of Survey Area<br>mal Degrees) |  | Survey Area Bound        | aries (Decimal Degrees | s)                       |
|-----|--------------------------------|--|--------------------------|------------------------|--------------------------|
| LAT | LONG LAT North of Boundary     |  | LAT South of<br>Boundary | LONG West of Boundary  | LONG East of<br>Boundary |
|     |                                |  |                          |                        |                          |

| (Circle do<br>From National Lar<br>each classification is | at Type minant type) nd Cover Database, further defined here gov/nlcd11_leg.php | % Est. Vegetative cover (circle one) | Number of<br>native<br>plant spp.<br>in flower<br>(circle one) | Description of dominant management practices on the survey area | Description of observed<br>or likely stressors in<br>survey area (e.g., use of<br>pesticides, tilling, etc.) |
|---|---|--------------------------------------|--|---|--|
| Open water  | Mixed Forest  | <10%                                 | 0 species  |   |  |
| DevelopedPark   | Ever.Forest<br>Shrubland  | 10-24%                               | 1-4 species  |   |  |
| Developed-  | Grassland   | 25-49%                               |  |   |  |
| Low/Med/High  | Pasture/Hay<br>Cultivated Crop  | 50-75%                               | 5-9 species  |   |  |
| Barren Land<br>Decid. Forest                              | Woody wetland<br>Herb. wetland  | >75%                                 | 10- 14 spp   |   |  |
|   | Other   |                                      | 15+ spp  |   |  |
| File/folder name  | s of representative   | survey area p                        | Supporting map file,   | /folder name(s)   |  |
|   |   |                                      |  |   |  |

| Bumble Bee Survey Field Data Sheet Page of | Unique Survey ID:<br>Date:     | Transect ID (if applicable)                 |  |  |
|--|--------------------------------|---|--|--|
| Were Bombus present?                       | Are Honey Bees (Apis) present? | Bombus to Apis Ratio (circle closest        |  |  |
| Y or N                                     | Y or N                         | estimate) 20+:1, 2-19:1; 1:1; less than 1:1 |  |  |

| Species | No. of<br>Females | No. of<br>Males | No. of<br>Queens | Flowers or species of plant being used | Actual (A) or<br>Estimated (E)<br>counts? | %<br>ID<br>Conf* | Distance<br>(m)<br>Distance<br>sampling<br>only |
|---------|-------------------|-----------------|------------------|--|---|------------------|---|
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |
|         |                   |                 |                  |  |   |                  |   |

<sup>\*</sup>Self evaluation of your confidence in your identification of each species (95-100% confident, 75-94%, 50-74%, 5-49%, <5%).

| Individual Bee Data for <i>B. affinis</i> (Enter each <i>B. affinis</i> capture point as separate row) |         |        |        |                     | <i>B. affinis (</i><br>(Decim | Distance<br>Sampling<br>only |          |
|--|---------|--------|--------|---------------------|-------------------------------|------------------------------|----------|
| Species  | No. of  | No. of | No. of | Flowers or species  | LAT                           | LONG                         | Distance |
|  | Females | Males  | Queens | of plant being used |                               |                              | (m)      |
| B. affinis   |         |        |        |                     |                               |                              |          |
| B. affinis   |         |        |        |                     |                               |                              |          |
| B. affinis   |         |        |        |                     |                               |                              |          |
| B. affinis   |         |        |        |                     |                               |                              |          |
| B. affinis   |         |        |        |                     |                               |                              |          |

File Names of Photographs and Map Files: