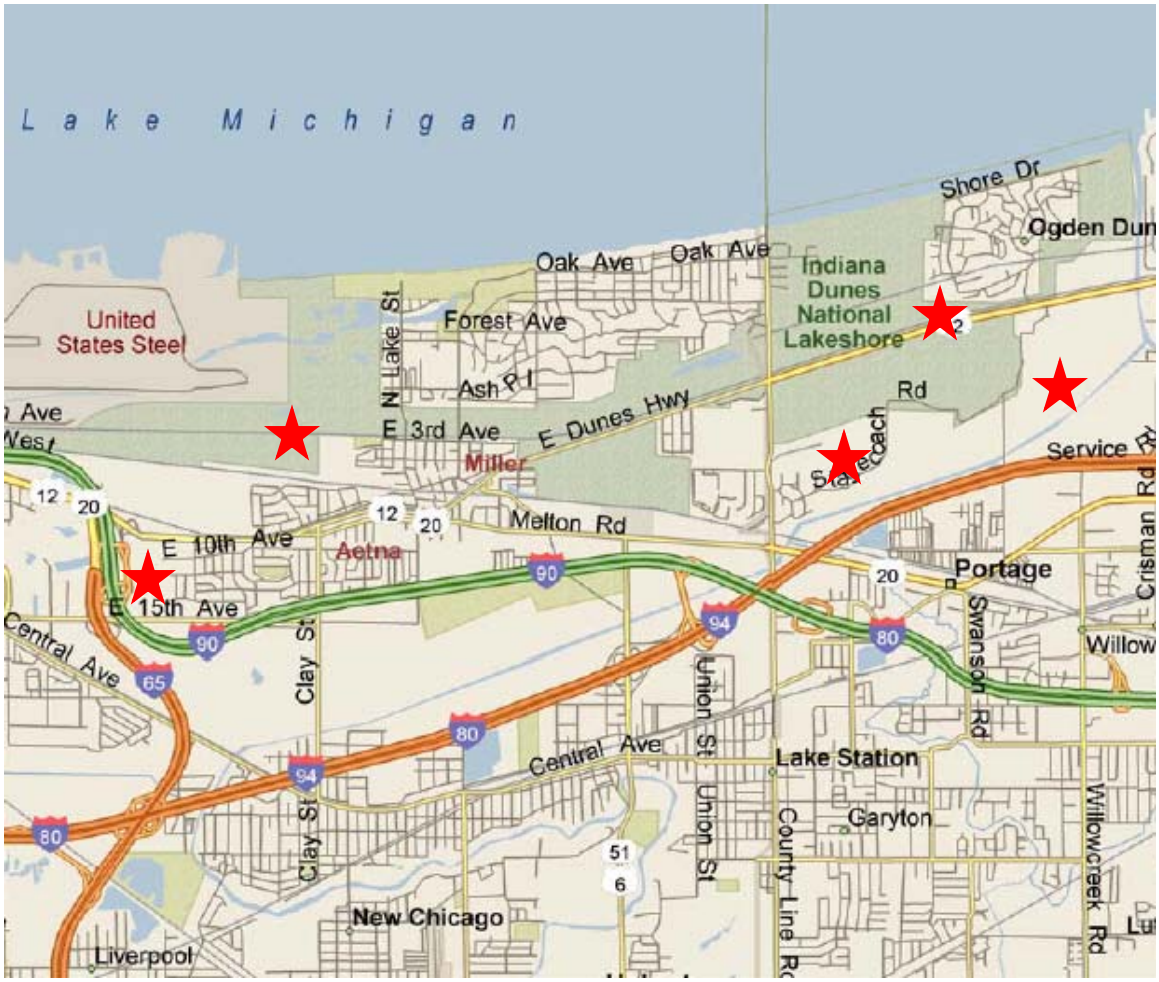
APPENDIX A:

MAPS / FIGURES



NIPSCO KBB HCP Plan Area ROW Locations

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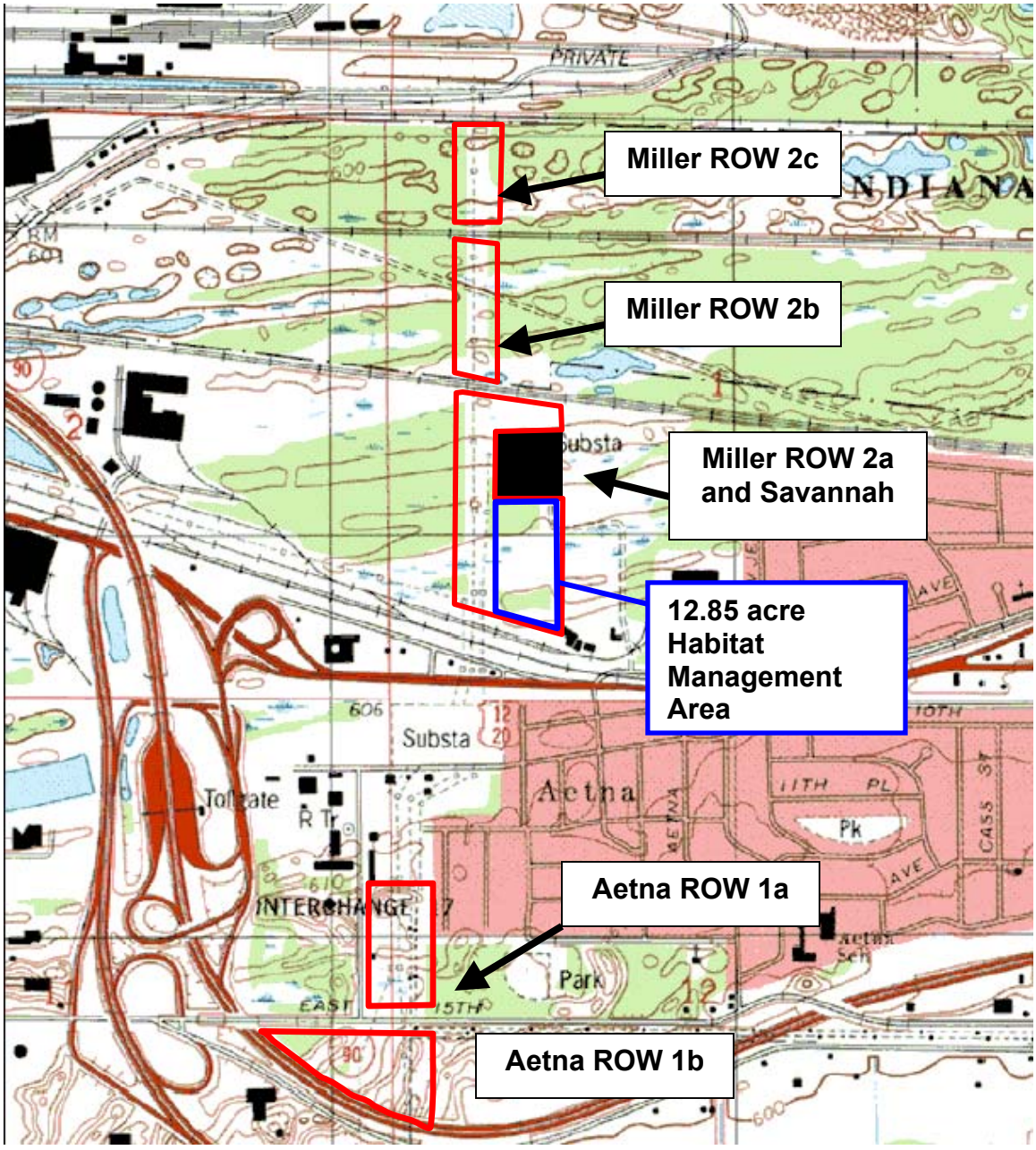
Plan Area Locations
Karner Blue Butterfly HCP
Northern Indiana Public Service Company

Figure 1



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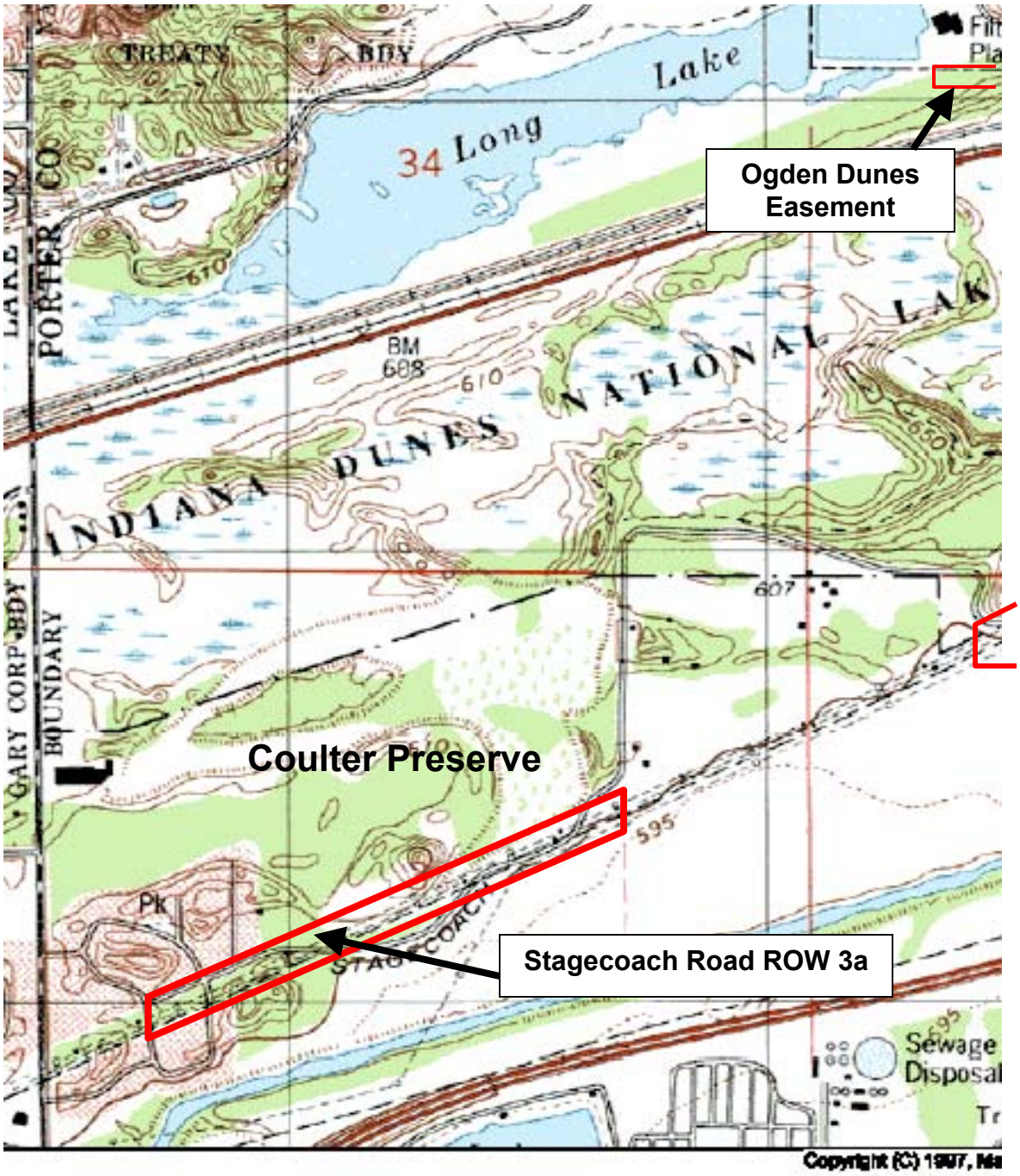
Aetna & Miller ROW Locations
Northern Indiana Public Service Company
Karner Blue Butterfly
Habitat Conservation Plan

Figure 2



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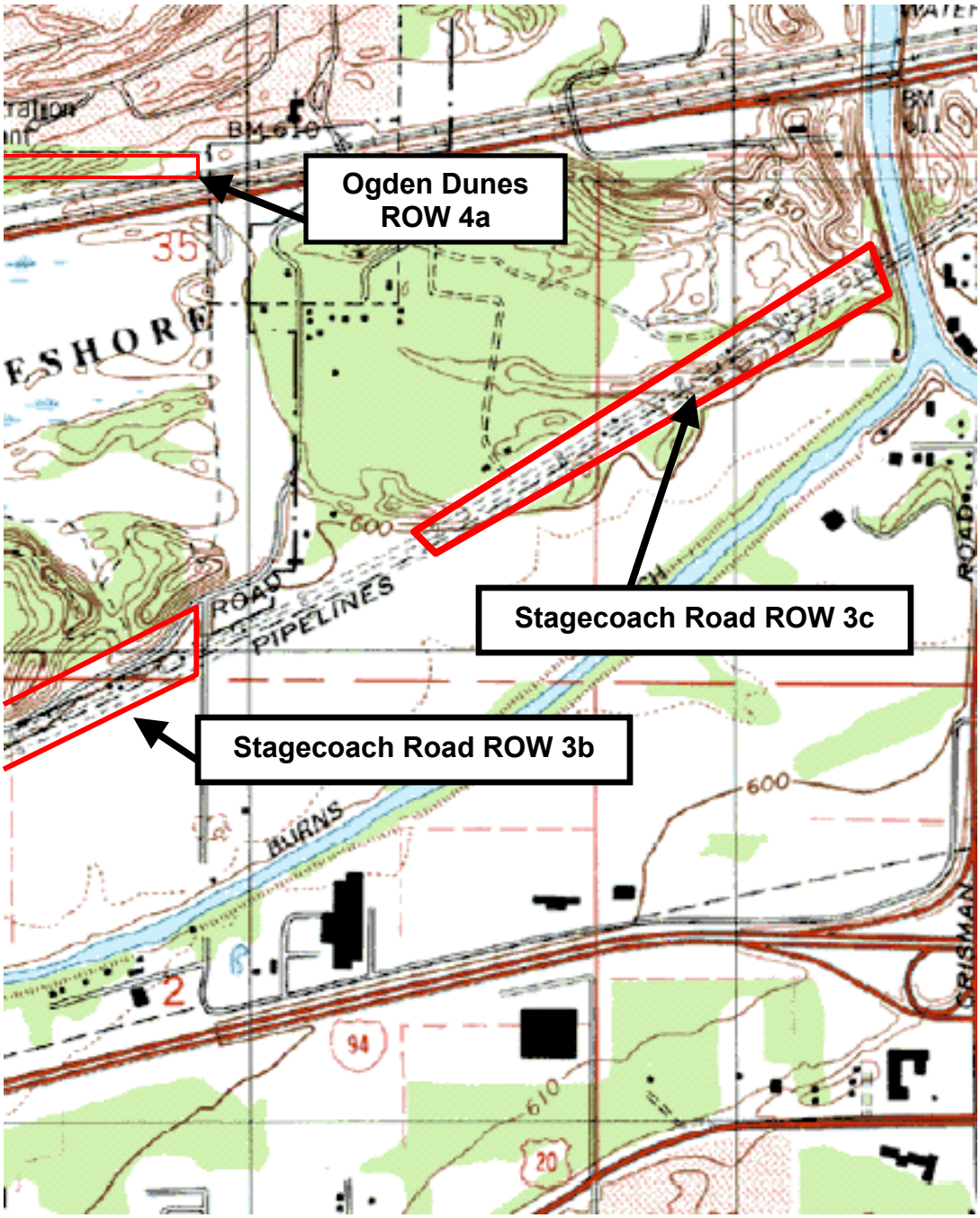
Stagecoach Road & Ogden Dunes ROW
Northern Indiana Public Service Company
Habitat Conservation Plan for the
Karner Blue Butterfly

Figure 3a



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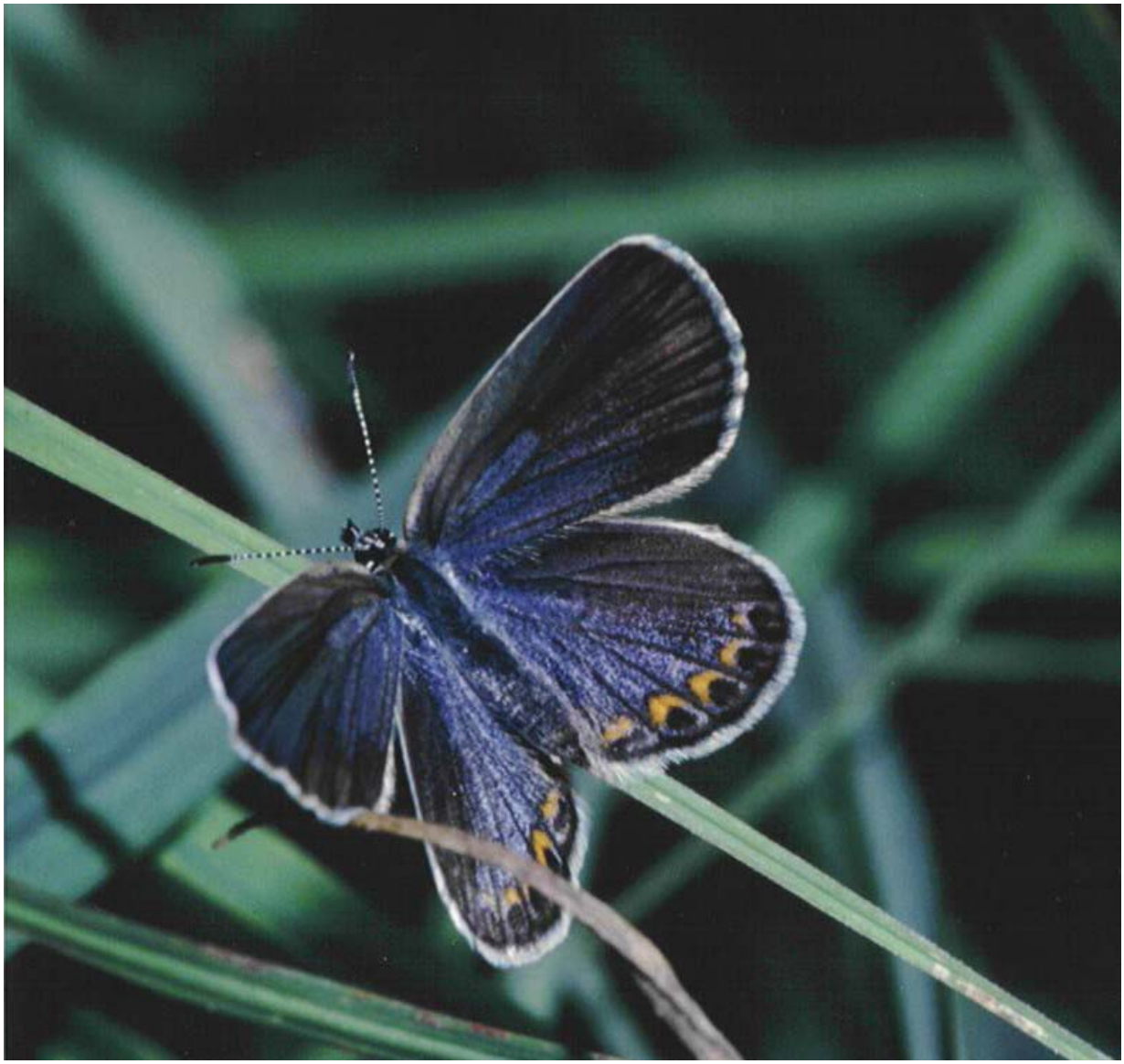
Stagecoach Road & Ogden Dunes ROW
Northern Indiana Public Service Company
Habitat Conservation Plan for the
Karner Blue Butterfly

Figure 3b



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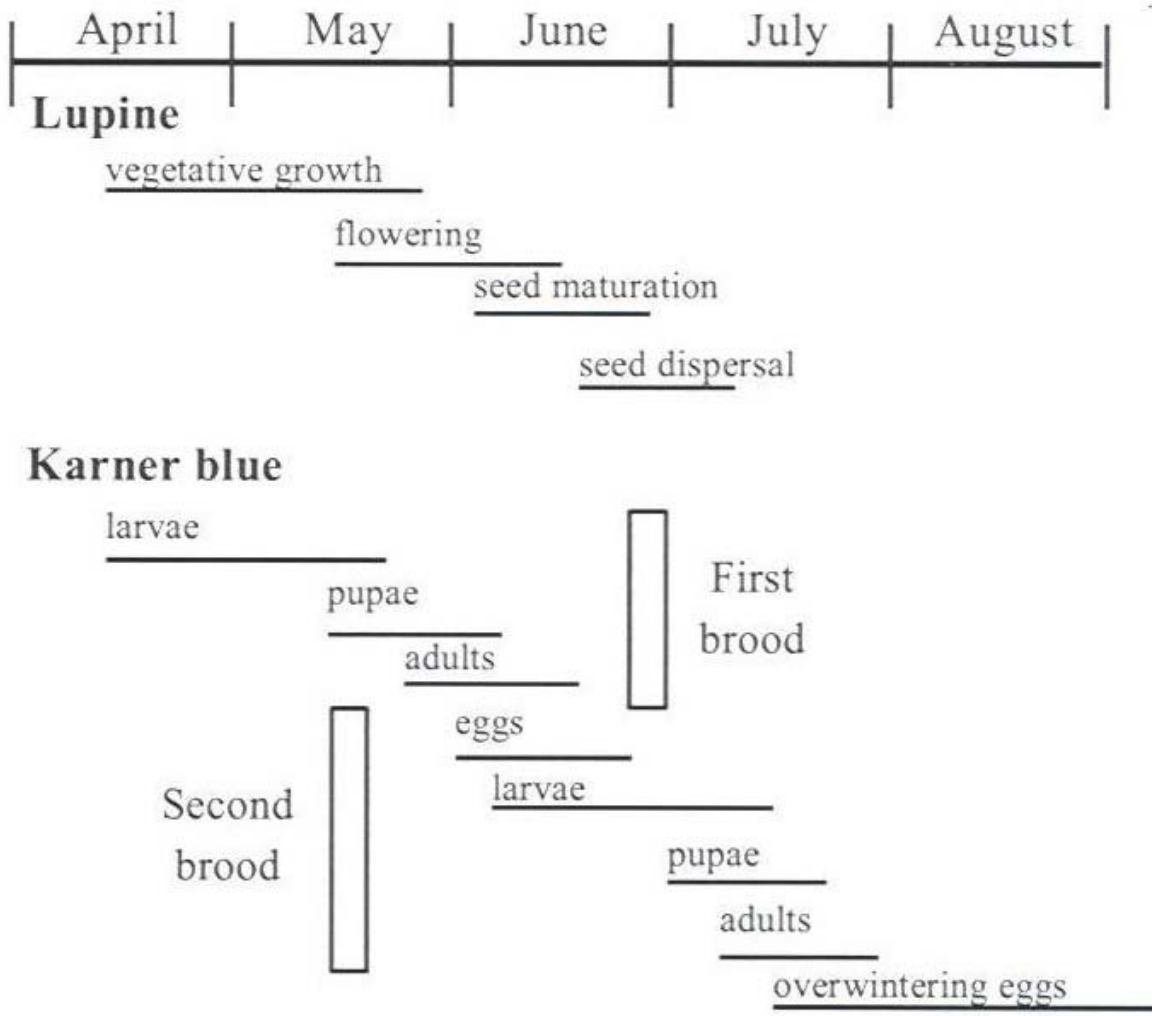
Karner Blue Butterfly

Figure 4

Phenology of the Karner blue and lupine. In colder (warmer) areas and years phenologies will be delayed (advanced).



Phenology of the Karner Blue Butterfly & Wild Lupine

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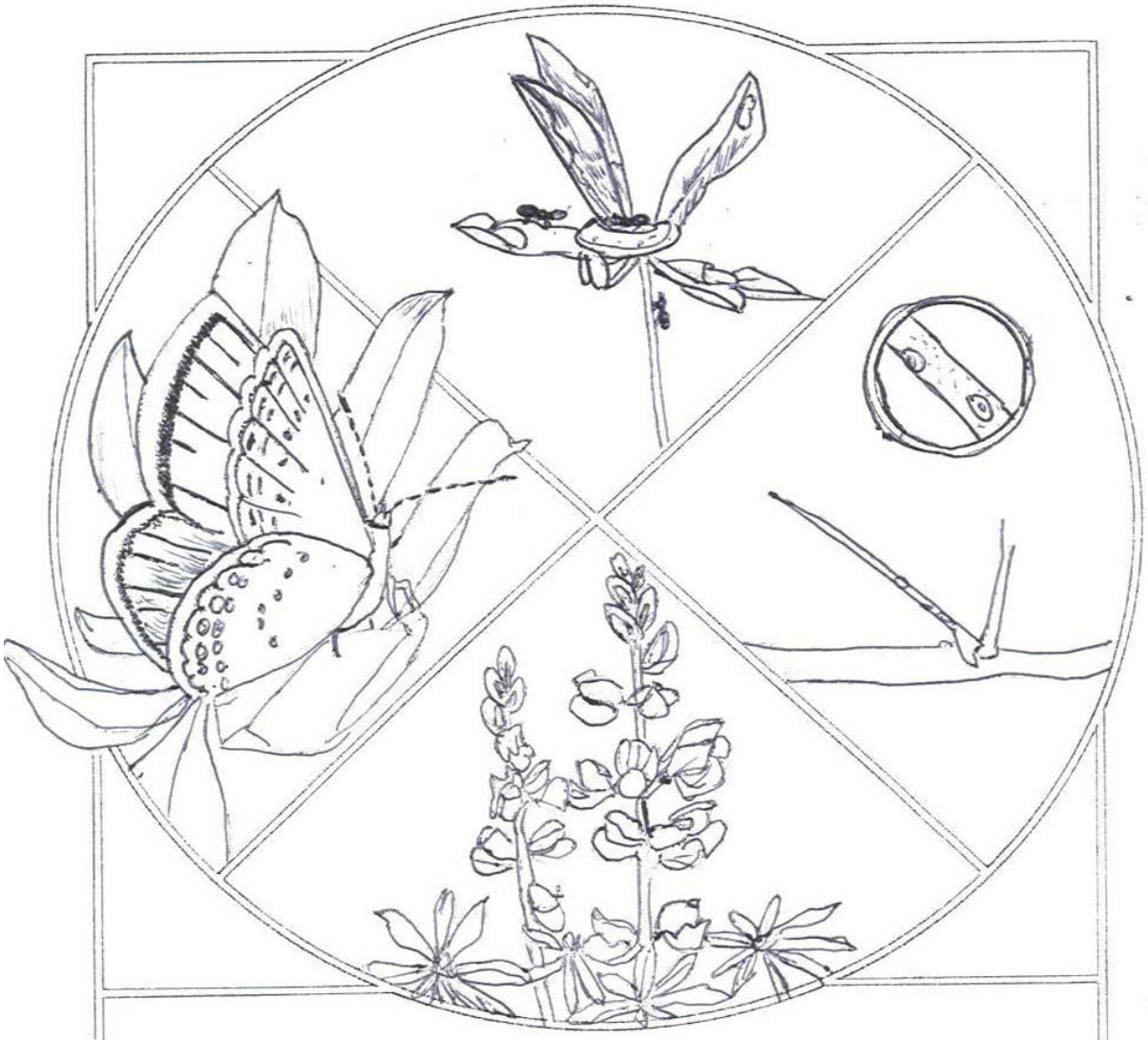
Figure 5



Karner Blue Butterfly Life History: The Karner blue butterfly produces two broods of young each year, a spring brood and a summer brood. Larvae emerge in April from eggs that have overwintered and feed on wild lupine, Lupinus perennis, the only known larval food plant of the butterfly. The larvae are often attended by ants, which collect a sugary solution secreted by the larvae, and in turn may protect the larvae from predation and/or parasitism. Near the end of May, the larvae pupate and adults emerge in late May or early June. The butterfly then mates and lays eggs on the lupine plant. The second brood of butterflies emerge mid-July to early August. Their eggs overwinter to hatch again in April.

Karner Blue Butterfly Life Cycle

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Figure 6

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Wild Lupine

Figure 7a

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Wild Lupine

Figure 7b

Karner Blue Butterfly Nectar Species On NIPSCO HCP ROW

Scientific Name	Common Name
Amorpha canescens	Lead plant
Apocynum spp.	Dogbane
Arabis lyrata	Sand Cress
Asclepias tuberosa	Butterfly weed
Asclepias verticillata	Whorled milkweed
Bertotoa incana	Hoary alyssum
Ceanothus americanus	New Jersey tea
Chrysanthemum leucanthemum pinnatifidum	Ox-eye daisy
Coreopsis spp.	Coreopsis
Euphorbia corollata	Flowering spurge
Helianthus occidentalis	Western sunflower
Heiracium aurantiacum	Orange Hawkweed
Liatris spp.	Blazing star
Lithospermum spp.	Puccoon
Melilotus spp.	Sweet clover
Monarda punctata	Horsemint
Potentilla simplex	Common cinquefoil
Rubus spp.	Blackberry Dewberry Raspberry
Rudebeckia hirta	Black Eye Susan
Solidago speciosa	Showey goldenrod

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Karner Blue Nectaring Species

Figure 8

WILDLIFE HABITAT

MANAGEMENT AREA

Contact NiSource Environmental Health and Safety Department prior to any activities

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Habitat Management area sign

Figure 9a

WILDLIFE HABITAT MANAGEMENT AREA

Contact Indiana-American Water Company

219-886-3770 prior to any activities

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Habitat Management Area Sign

Figure 9b