



Polish and EU requirements of amphibian inventories for EIA for infrastructure projects and the implementation of it for amphibian mortality mitigation during the construction phase.

**Stefan Obłąkowski
(FPP Consulting)**

CONTENT OF THE TALK

- Amphibian inventories according to the Polish and EU legislation
- Environmental supervision during the construction phase



AMPHIBIAN INVENTORY STUDIES AND GUIDES PREPARED BY INSTITUTIONS AND ORGANIZATIONS:

- Guide for protection of amphibians. Protection of wild animals in the design of road construction projects. Problems and good practice. (R. Kurek, M. Rybacki, M. Sołtysiak)
- Environmental studies for roads - Good Practice Guide (red. J. Bohatkiewicz) – suggested by the National Road Authority
- Monitoring of animal species. Methodological guide. Makomaska-Juchiewicz M., Baran P. (red.). 2012
- Investor tender specifications / requirements of the Investor



The assessment of the conservation status of the habitats of species is carried out in steps, taking into consideration different scale and level of precision.
It consists of 5 basic steps.



STEP I - IDENTIFICATION OF KNOWN AND VALUABLE NATURAL OBJECTS

- Work using topographic maps and ortho-photos
- Analysis of documentary material of the Regional Directorate of State Forests and Forest divisions
- Analysis of existing scientific studies
- Analysis of data from the Regional Director of Environmental Protection + CONSULTATION
- Analysis of data from local NGOs



STEP II - MULTIPLE FIELD VISITS BY AN INTERDISCIPLINARY TEAM OF NATURALISTS - VERIFY THE NUMBER AND RANGE SELECTED IN STAGE I OF NATURAL OBJECTS

During the mating season, the number of individuals of all species of amphibians in water reservoirs is estimated on the basis of:

- Number of spawn clusters
 - Males calling
- The number of adults encountered during the inspection
- Animals caught by special herpetological nets



The amphibian inventories consist of three basic elements:

- Migration routes (spring/autumn)
 - Breeding habitats
 - Hibernation habitats



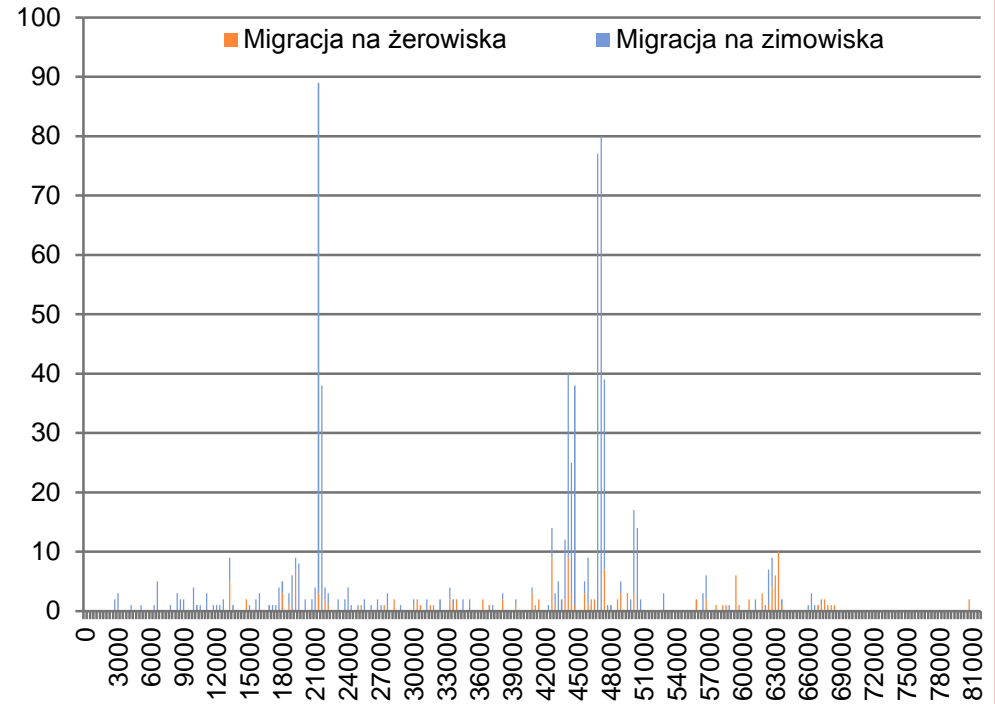
STEP III – MAPPING OF THE COLLECTED DATA

Amphibian migration routes



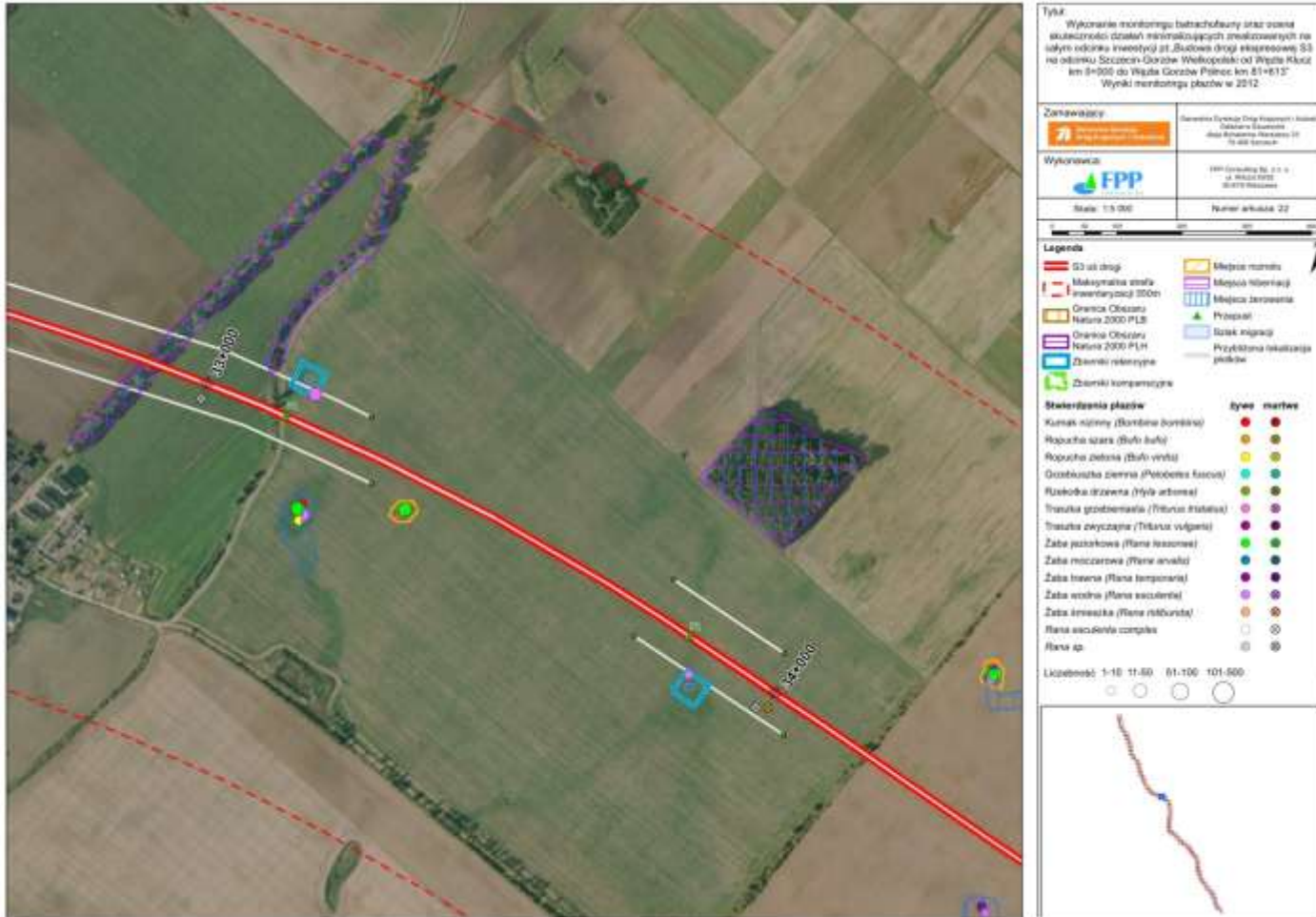
STEP III – MAPPING OF THE COLLECTED DATA

Amphibian migration routes




STEP III – MAPPING OF THE COLLECTED DATA

Amphibian breeding, foraging and hibernation habitats
along road infrastructure



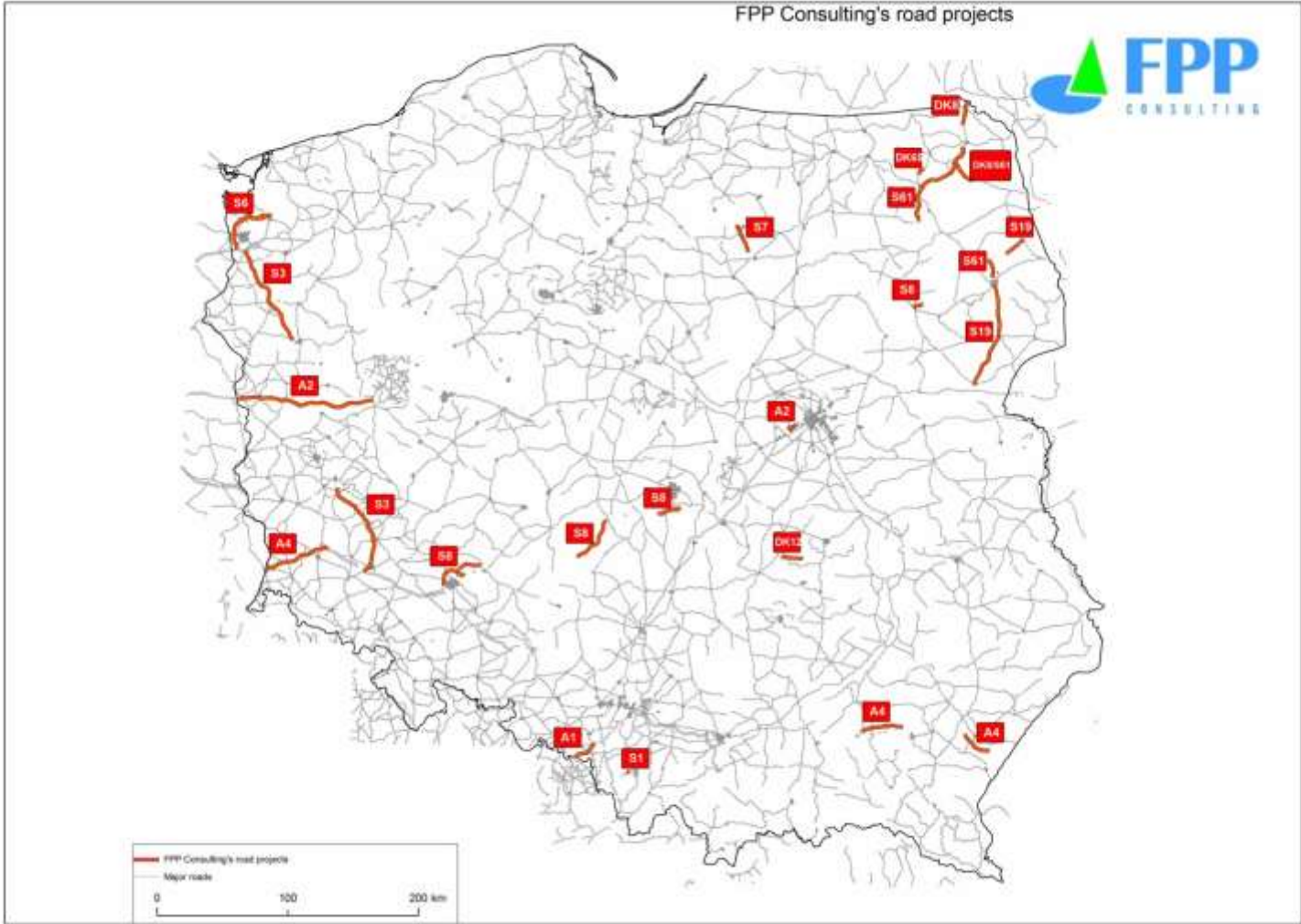
STEP IV & V – VALUATION AND SENSITIVITY ANALYSIS OF NATURAL OBJECTS AND DESCRIPTION OF MITIGATION AND COMPENSATION ACTIONS

Measures aimed at mitigating / compensation:

- Identifying sites that require the design of passages and culverts for animals and sections where fences must be designed to prevent the intrusion of animals on the road
 - Construction of replacement (compensatory) breeding ponds
 - Improve habitat conditions in the vicinity of breeding ponds (terrestrial habitat)
 - Consulting the building time schedules
 - Herpetological supervision during the investment
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HERPETOLOGICAL SUPERVISION DURING THE BUILDING PHASE OF ROAD PROJECTS IN POLAND

OUR EXPERIENCE



HERPETOLOGICAL SUPERVISION DURING THE BUILDING PHASE OF ROAD PROJECTS IN POLAND



Temporary fences prevent amphibians from entering the building site



HERPETOLOGICAL SUPERVISION DURING THE BUILDING PHASE OF ROAD PROJECTS IN POLAND



Catching amphibians on the building site



HERPETOLOGICAL SUPERVISION DURING THE BUILDING PHASE OF ROAD PROJECTS IN POLAND



Amphibian rescue actions along the building site

HERPETOLOGICAL SUPERVISION DURING THE BUILDING PHASE OF ROAD PROJECTS IN POLAND

The Pro's of the environmental supervision as the result of the EIA inventory data:

- Good knowledge of the migration routes allows to stop amphibian mortality on the building site;
- Identification of ponds provided for filling in;
- Best location to move the amphibians from the building site;



Thank you for your attention

