



FIG Commission 3 Workshop

**The Empowerment of Local Authorities:
Spatial Information and Spatial Planning Tools**

Paris, France, October 25-28 2011

A Spatial Planning Tool for Local Authorities: Strategic Environmental Assessment

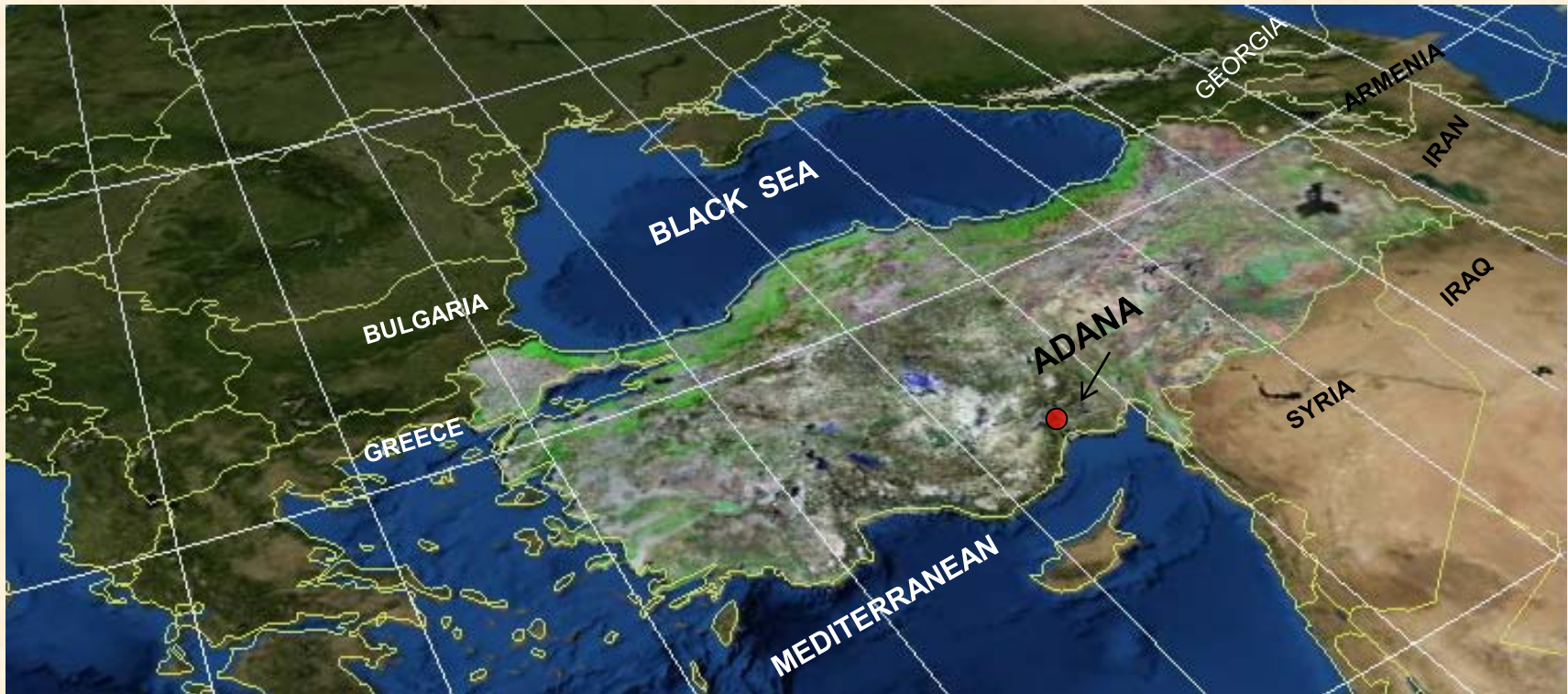
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TURKEY



Area: 814.578 km²

Population: 73.722.988 (December, 2010)

There are 81 administrative province

The Current State of SEA in Turkey

Strategic Environmental Assessment (SEA)

- SEA can be defined as a systematic process, evaluating the environmental, economic and social results of any suggested policy, plan or programme.
- SEA is developed as a more comprehensive evaluation system as a result of arising concerns related with the insufficiency of EIA carried at project level

There are four phases in the governmental activities related to the decision-making procedure.

The development plans in Turkey include all these four phases. Among these phases, environmental assessment is only practiced at the project level. This solely constitutes one part of the Integrated Environmental Management



The Current Status of SEA in Turkey

EIA is legal

Environmental Impact Assessment (EIA) has been applied to individual investments in Turkey since 1993

SEA is not legal

- Discussions and preparations was started about SEA regulation in 2000
- SEA draft regulation was prepared in 2005 and was prepared depending on the EU directive (SEA Directive 2001/42/EC)
- This draft is including only physical plans and programs.
- The Ministry is planning to enact this regulation end of this year.
- The scientific approach into the subject is very new in Turkey, it take time to answer the questions about how and in what fields to practice the subject

- The practices of SEA are closely related to the administration system, planning system and decision making procedure in central or local government in the countries.
- SEA practices and SEA procedures may change from country to country.
- The subjects that required strategic decision-making process have been gathered in five groups for Turkey by taking into consideration national and international SEA systems.

The subjects that required strategic decision making process have been gathered in five groups for Turkey

National Development Plans (FYDPs) and Sectoral Plans: Socio-economic plans including macro economic targets and sectoral development policies prepared by Prime Ministry State Planning Organization (SPO).

Regional Development Plans: Plans, aiming to improve the socio-economically underdeveloped regions, to provide the effective use of sources in the region and to improve income distribution in the country such as Southeastern Anatolia Project-SAP, Eastern Anatolia Project-EAP.

Legal Regulations: Laws and international convention for especially effective uses of natural sources such as the Forest Law, Tourism Encouragement Law, Coast Law.

Privatization Policies: Privatization activities have been in progress with the effect of laissez-faire economy since 1985 in Turkey. Especially privatization policy in the energy and tourism sectors are effective on the environment.

Physical Plans: Urban developmental plans and other land use plans, Environmental plans prepared by the Ministry of Environment and Forestry, urban master plans by municipalities, Infrastructure plans, tourism plans.

It is required to answer primarily two basic questions in order to approach SEA practice on urban development plans.

❑ When?

In which phase to practice SEA?

❑ How?

How to conduct SEA?

This research project aims that analyzing,

WHEN - -SEA integration into the decision-making process of urban planning.

HOW- -The practicability of SEA into the Urban Development Plans prepared by local governments

The research is based on two parts.

In the first part:

A procedure about how to practice SEA at the institutional level according to the urban development plans is offered.

The basic steps was determined in legal process for SEA applications.

In the second part:

SEA practice model for urban development plans is developed in the case of Adana City Plan.

In the direction of the results of studies conducted in the first part, a proposal model was developed

THE METHOD OF THE FIRST PART

1. Stage

Theoretical Framework and Scope of SEA

Current situation of
SEA

Importance and
necessity of SEA for
Turkey

Subjects will be scoped
by SEA

2. Stage

Urban Planning System in Turkey

The process of preparation of
urban development plans

Policies in decision-making
process

3. Stage

Implementation Opportunities of SEA on Development Plans

Examining the relationship between
the SEA and development plans

the principles of SEA for
development plans

FIRST PART: SEA Integration to Urban Planning System

- Our findings related to first part of project are presented as follows subjects;
 - The phases of the SEA process on Urban Development Plans
 - The issues to be solved for SEA process
 - Tools to be used on SEA process
- The main issues taken into account to reach these results:
 - The theoretical frame of SEA
 - The administrative system in Turkey
 - Planning hierarchy
 - The perspectives of the institutions responsible for the planning (questionnaire-interview)
 - The content of the urban development plans
 - Draft SEA Regulation in Turkey.
 - The SEA Directive of the European Union

The phases of the SEA process

1.SCREENING

Responsible: **Ministry of Environment and Forest (MEF)**
 According to the screening method (apendix II), the Ministry of Environment and Forest decides whether SEA will be applied on a plan or program

- ⇒ Consultation of the related institutions
- ➔ Information of the public



4.QUALITY-CONTROL

The **second public participation** meeting is held to get views about the prepared report (**Observer:** Public, MEF)

Authorised institution completes the report by taking into account the views in the meeting and presents it to **MEF**

The **MEF** analyses the report and shares the views with the authorised institution

The **authorised institution** completes the missing points.



In this project the content of this 6 phases were formed according to

- the responsibility of municipalities,
- the urban plan preparation process and
- the draft regulation on SEA

d institution decides on the plan or of The Ministry of Environment of the public of the related institution

REPORT

⇒ Consultation of **related institution**

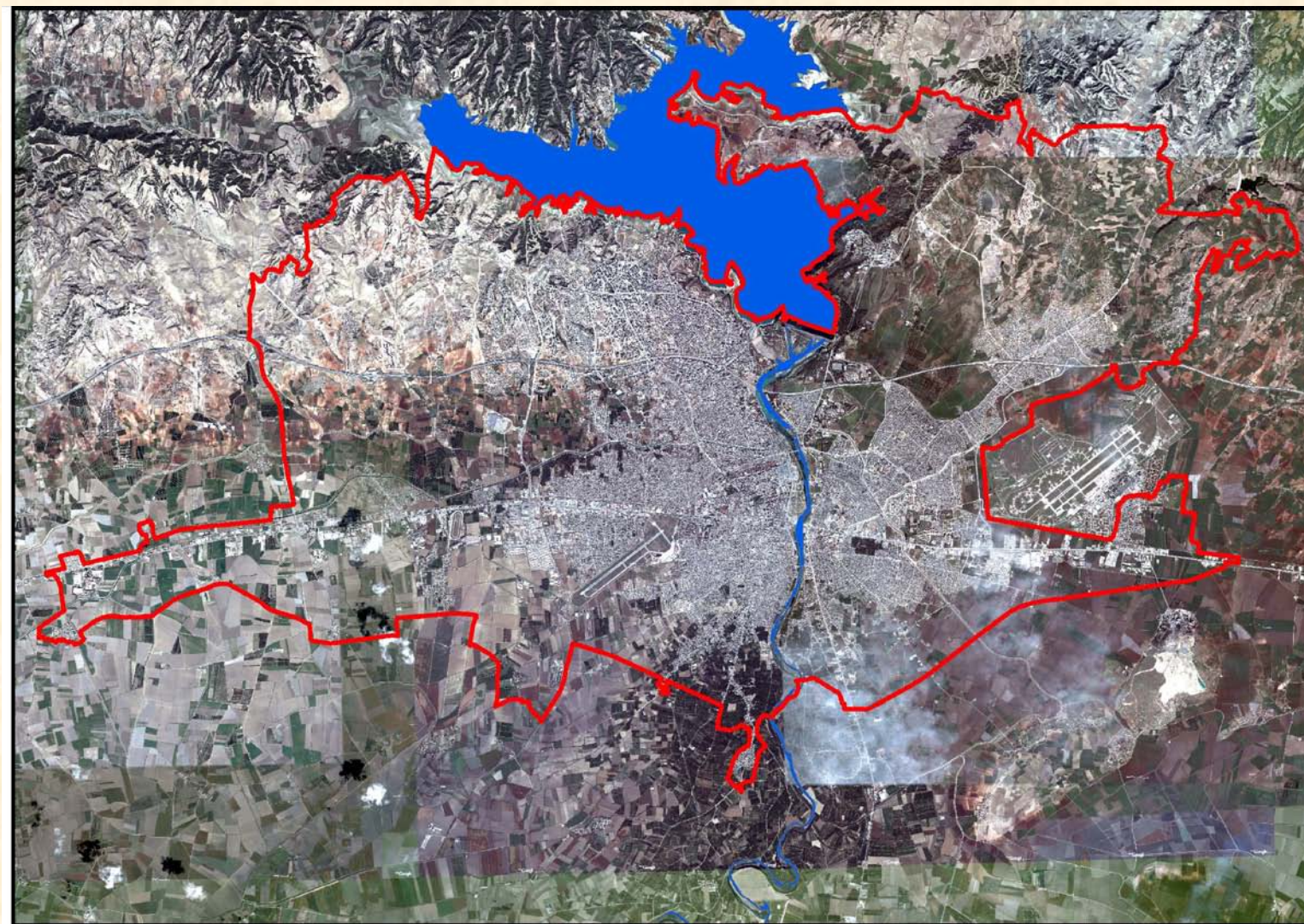
According to this format, the **authorised institution** prepares the SEA report.
 ➔ **Public consultation**



- ➔ = obligatory
- ⇒ = if required
- = facultative

d institution presents the confirmed report to the MEF with the viewing and acknowledgement report

THE SECOND PART: The Case Study



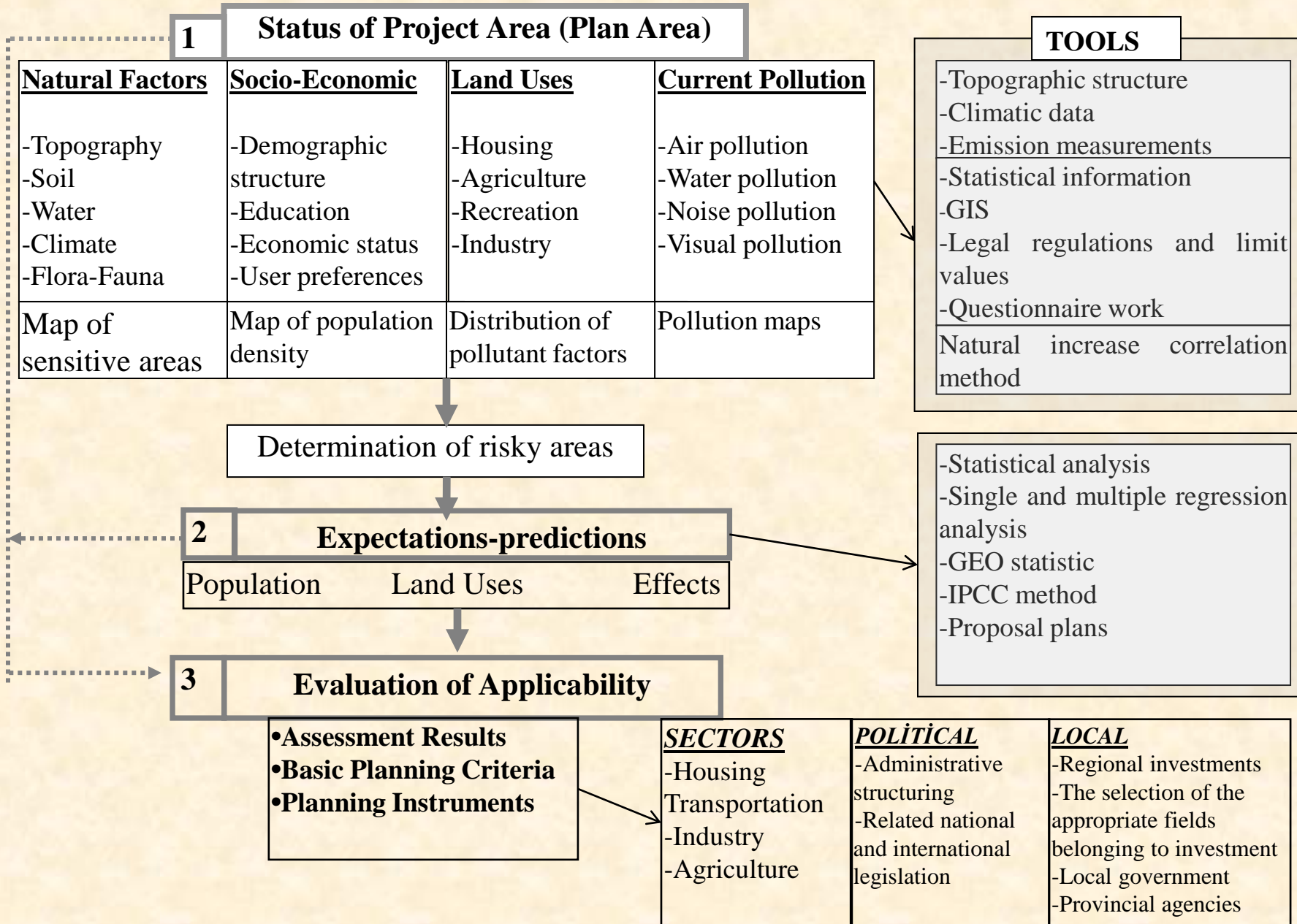
— Border of development plan

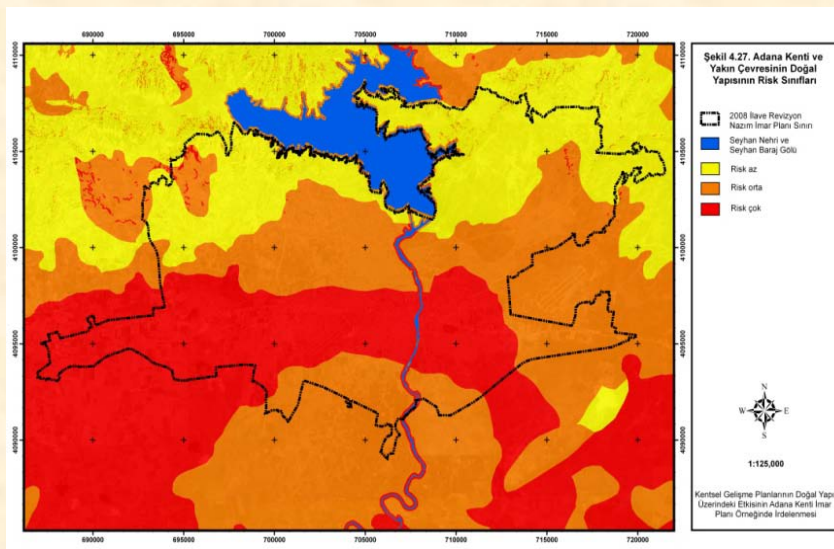
Location :
36030'-38023'
kuzey enlemleri
ile 34046'- 36026'
doğu boylamları

Population:
1 530 257 plan area
2 006 650 adana
city

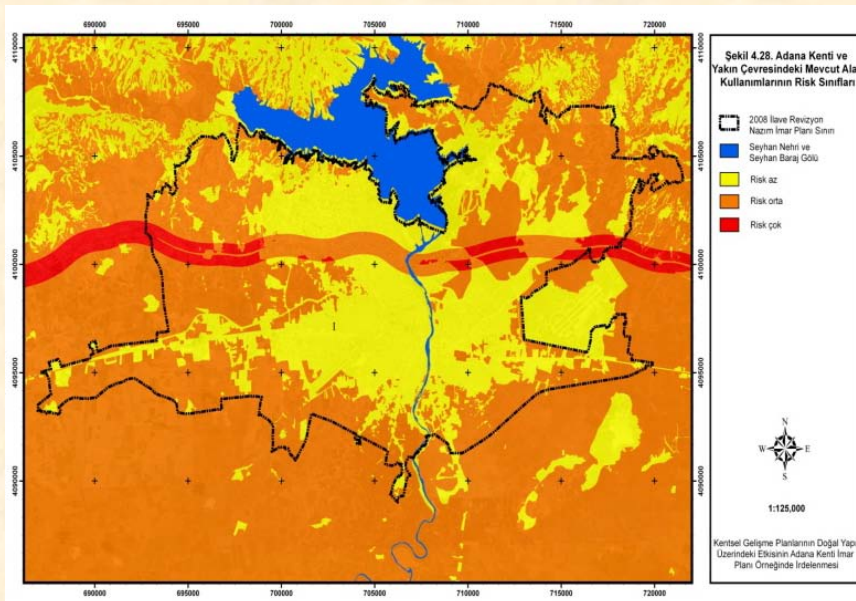
Adana Urban development plan approved by municipality in April 2008 cover 32 500 ha area

THE METHOD OF SECOND PART





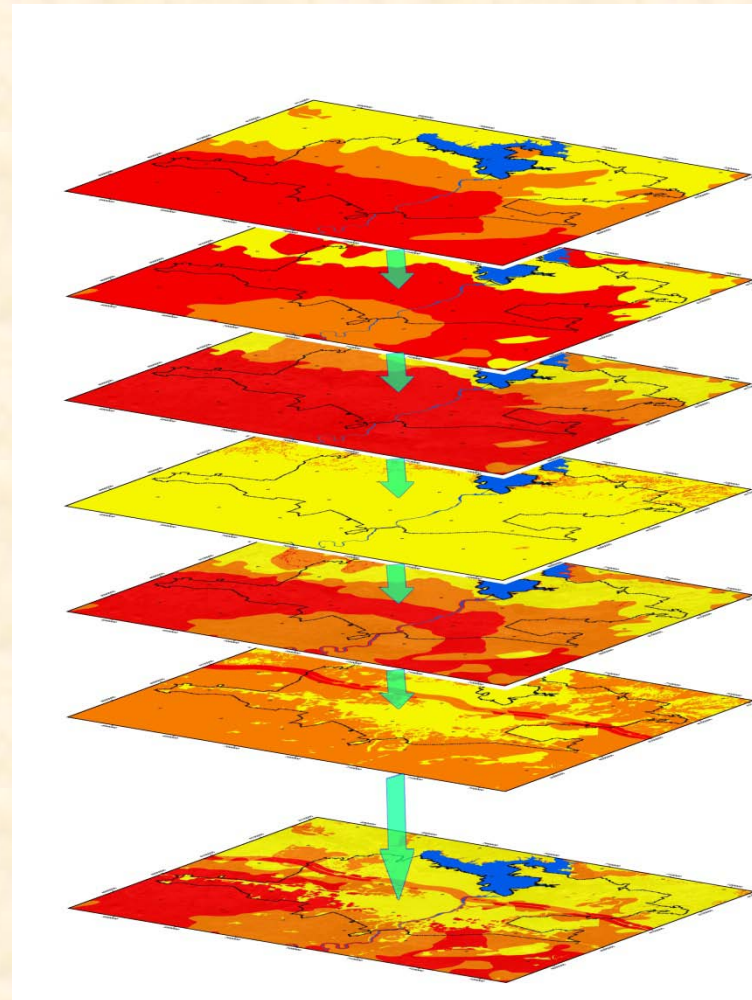
Risk Classification of Natural Structure



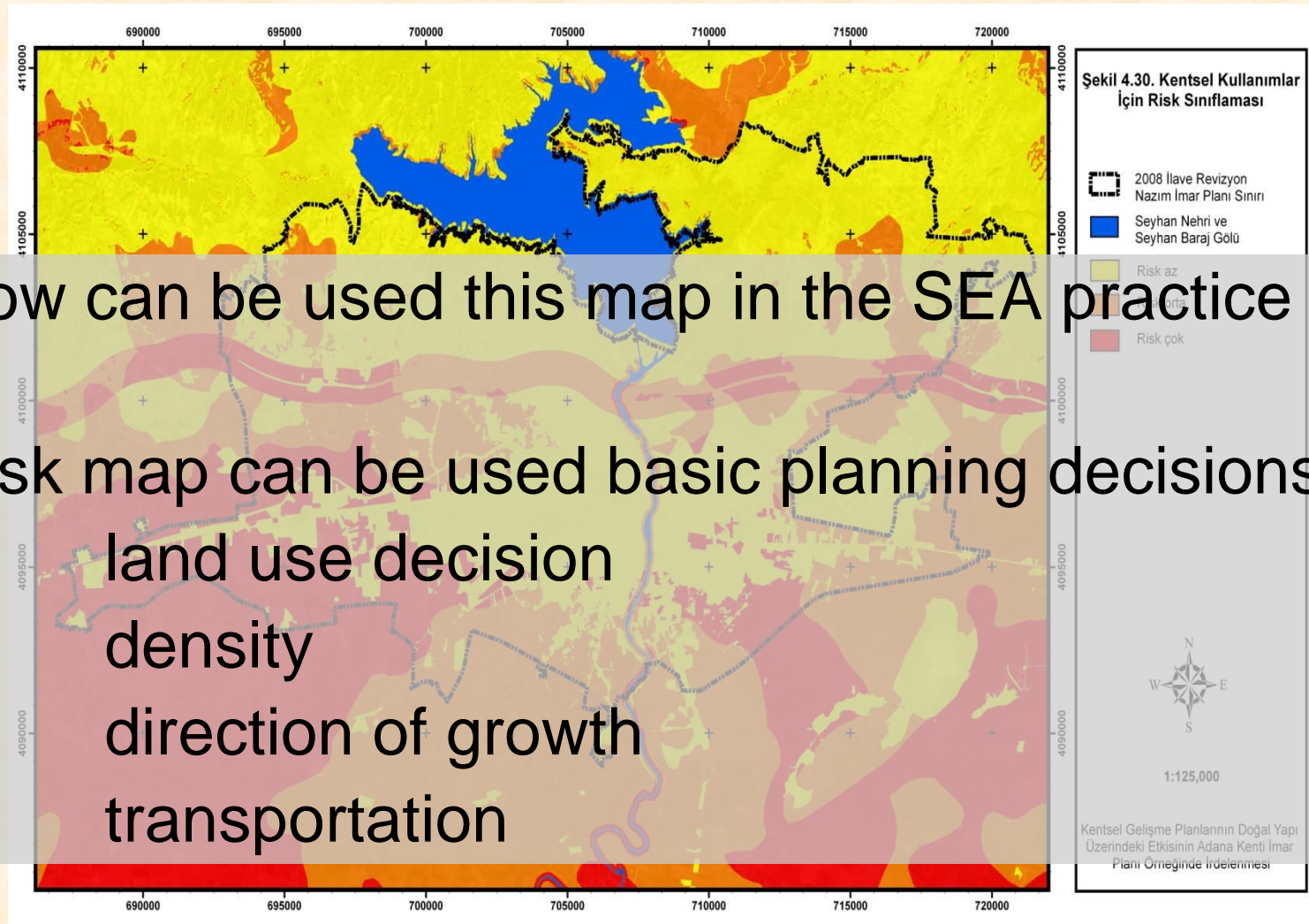
Current Land Use Risk Classification

Creating Risk Result Map and Overlay of Maps and GIS analyzing

- Multy criteria analysis
- Weighting risk pointing has been realized according to each effect level and risk degree
- Questionnaire was made for weighting risk pointing with experts and
- For final point, AHP (*Analitik Hiyerarşi Prosesi*) was used



Risk Classification for Urban Use –Result Map



How can be used this map in the SEA practice

Risk map can be used basic planning decisions

land use decision

density

direction of growth

transportation

To create the result map, risk degrees and effect levels of all inputs multiplied. With adding all factors risk degrees in database ArcView 9.2, obtained results divided in 3 groups.

SEA On Urban Development Plans

Phases

Ancillary Tools

1-Determination of the Present Situation

Land uses

Sector production-consumption situation

Statistical data

Natural resources used by sector

Transportation, recreation, housing, trade building..)

The pollution

Pollution maps

Meteorological and topographic data

The first category is based on the sector, sector practice and the analysis of the available situation of affected factors.

Statistical data

Limit values

Population of

Population density, urban and rural

research area

population

Sensitive Regions

Protected areas

Protection statutes

and Protected area

Historical and cultural areas

Maps for protection areas

in research area

SEA On Urban Development Plans

2- Proposed Scenarios for the Future

Population

Population growth

Methods of
population
prediction

The following phases include future suggestions and the scenarios.

FUTURE

La

Impacts caused by sector

Effeacts

SEA On Urban Development Plans

3- Evaluation applicability

The Results Co-evaluation of subjects in
of the the 1. and 2.phases

Evaluation

Basic Criteria determining the

PRECAUTION Ev: Lastly, the findings from these two phases are
ION Cri evaluated and planning criteria are set.

the practice of criteria

Policy Tools Sectoral, Political, Local Local governments and their
policies

Administrative structuring

National and international law

Thank you
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Planning Hierarchy in the country

Planning Type		Frame-Scale	Scope
SOCIAL-ECONOMIC PLANS	National Development Plan <i>(Five-Year Development Plan)</i>	Written statements-country plan	-Macro-economic targets, -Sectoral aims, objectives and policies, -Social development aims
	Regional Plan Master Plan	Region - $1/500000$, $1/100000$ Metropolitan - $1/50\ 000$	Superior physical plans or High-level physical plans
PHYSICAL PLANS	Environmental Plan URBAN PLANS Urban Master Plan Implementation Plan	Sub region, province - $1/2000$, 50000 , 100000 Urban- $1/2000$, 5000 Urban - $1/1000$	Local physical plans or Local development plans
	Tourism development plan Reclamation development plan Rural development plan	Subregion- $1/1000$, 5000 Urban- $1/5000$ Rural- $1/1000$	Special aimed plans

Main Stages of The Regulative Plus Practical Process of SEA

	Phases		Ancillary Tools
TODAY	1-Determination of the Present Situation		
	Land uses	Sector production-consumption situation Natural resources used by sector	Statistical data
	The pollution situation of the research area	The first category is based on the sector, sector practice and the analysis of the available situation of affected factors.	
	Population of research area	Population density, urban and rural population	
	Sensitive Regions and Protected area in research area	Protected areas Historical and cultural areas	Protection statutes Maps for protection areas
FUTURE	2- Proposed Scenarios for the Future		
	The Development of the Sector	The following phases include future suggestions and the scenarios.	
	Economic Development		
	Projection of Population	Population growth	Methods of population prediction
Impact Assessment	Impacts caused by sector		
PRECAUTION	3- Evaluation applicability		
	The Results of the Evaluation	Lastly, the findings from these two phases are evaluated and planning criteria are set.	
	Basic Evaluation Criteria		
	Policy Tools	Sectoral Political	Local governments and their policies Administration, strategies