

**Regional Meeting on NAPs  
implementation – Lessons  
learned and the way forward  
Marseille, 17-18 October 2016**

# **Updated National Action Plan of Israel**

**Rani Amir  
Director, Marine Environment Division  
Ministry of Environmental Protection  
Israel  
Marseille, October 2016**



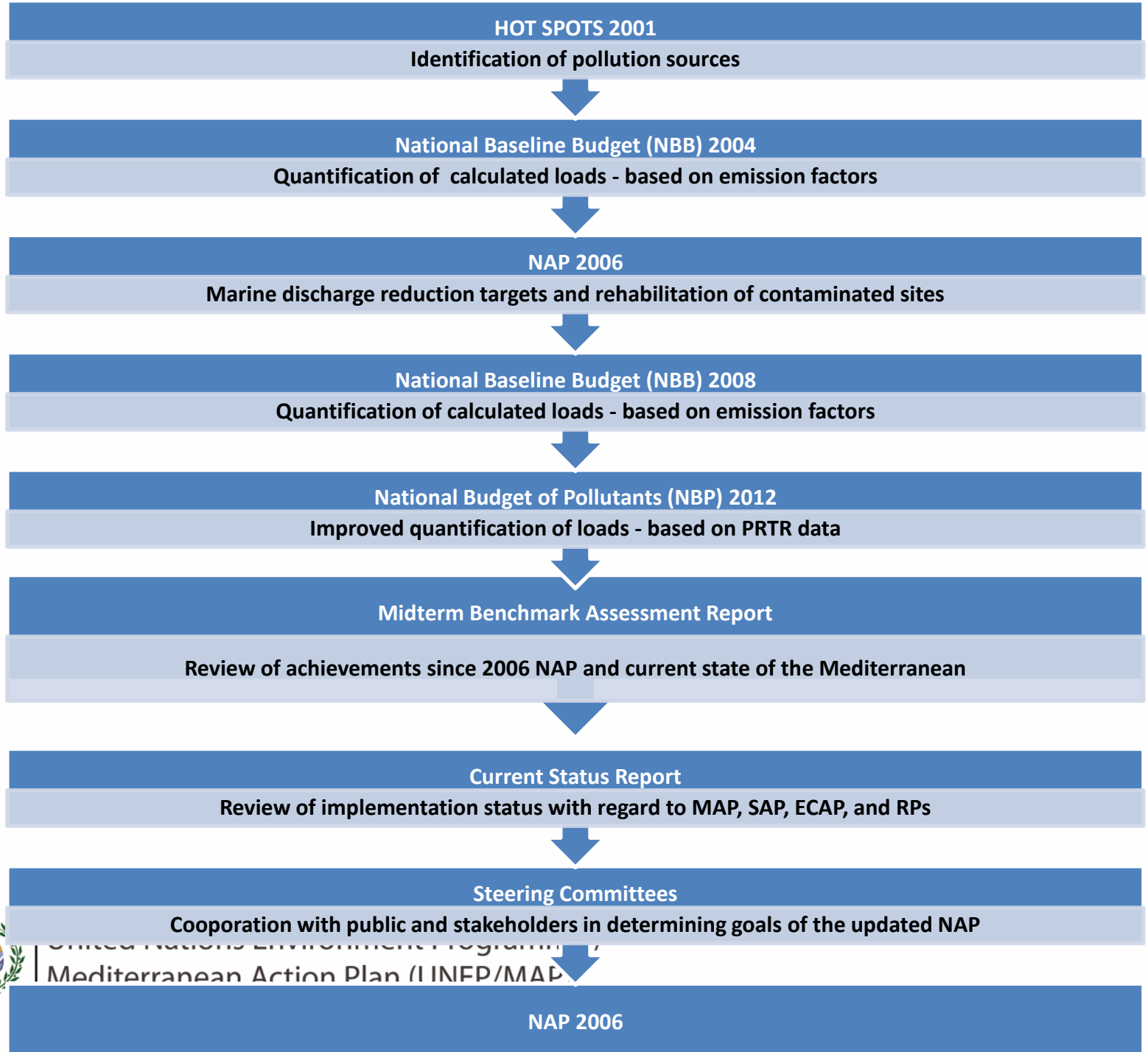
**המשרד להגנת הסביבה  
היחידה הארצית  
להגנת הסביבה הימית**

**ISRAEL**

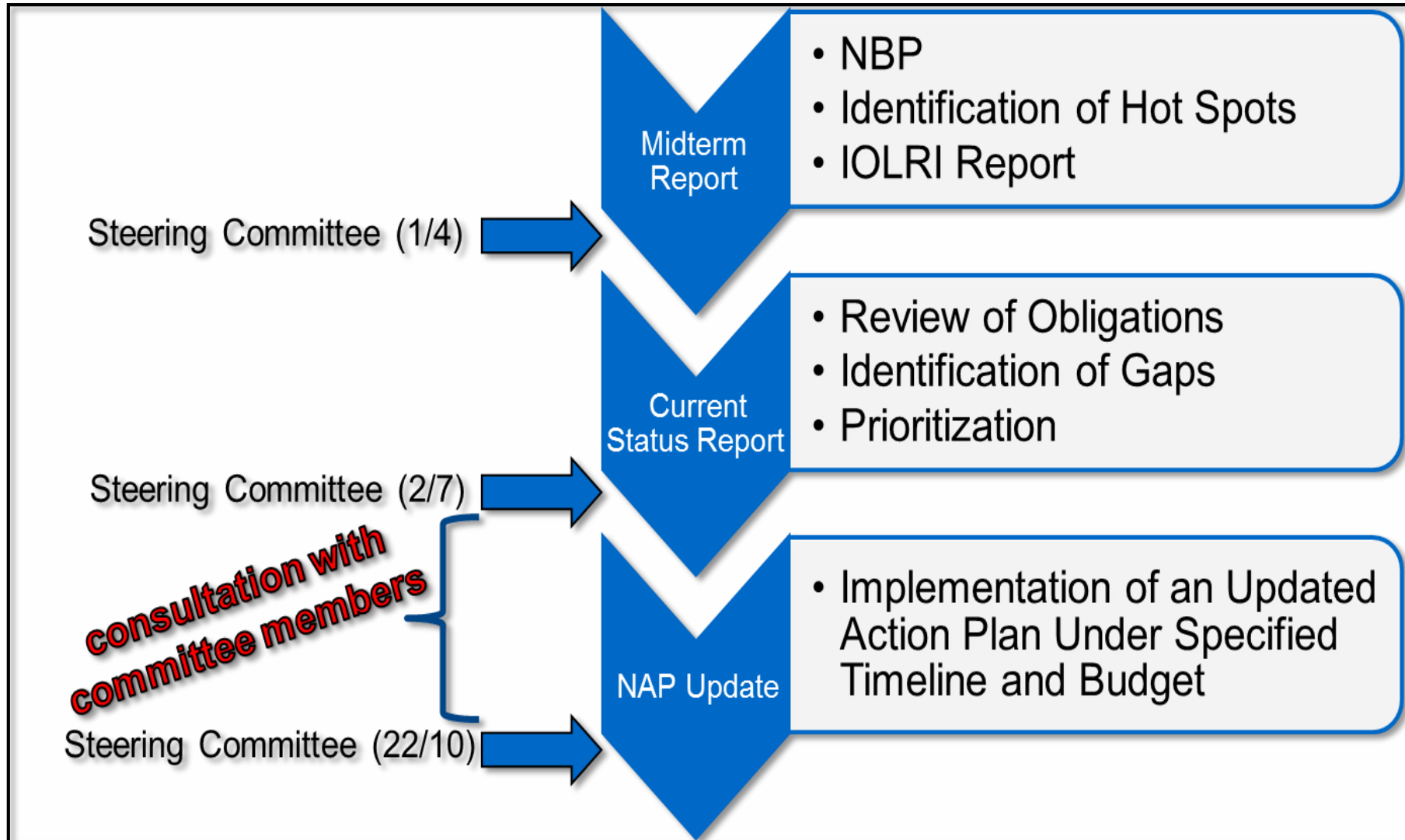
**MARINE ENVIRONMENT  
PROTECTION DIVISION**



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention



# Process followed



# Main Components of Focus Areas

**EO5 (Eutrophication) – RP on BOD, Reduction of Nutrients**

**EO9 (Contaminants) - RP on Mercury**

**EO10 (Marine litter) -RP on Marine Litter**



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention

# Operational Target 1- Runoff

**Reduce pollution from storm water run-off  
from urban areas**



# Operational Target 1 - Runoff

Setting up a monitoring effort to quantify and assess the quality and loads

Setting thresholds of pollution indicators (plastic debris, TSS, other)

Setting up legal means and instruments to control the run-off and outfalls

Management of urban storm water for reducing flows in favor of water preservation



# Operational Target 2 - Streams

- **Reduction of all pollution sources like overflow of WWTP, pesticides and nutrients from agriculture, aquaculture control**



# Operational Target 3 - ML

Minimizing the ML on the coastline and in the waters





# Operational Target 3 - ML

Reduction at  
source efforts  
(plastic bag fee)

ML public  
database sharing

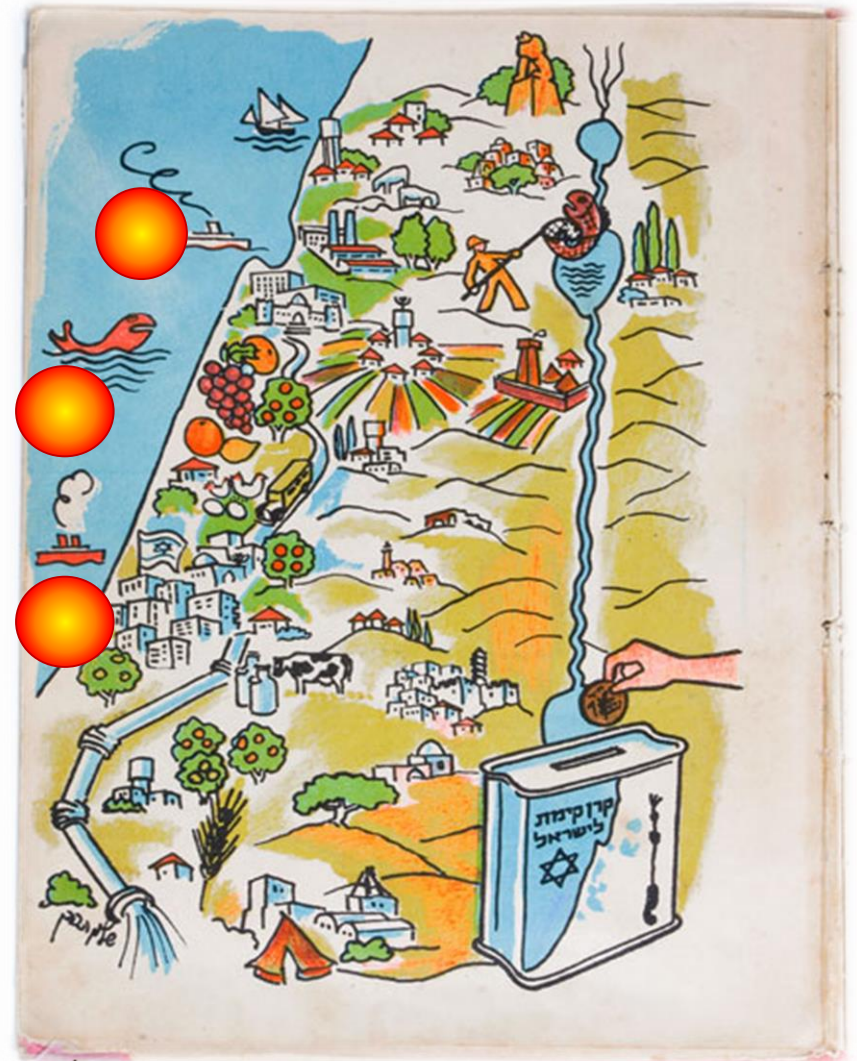
Expanding marine  
monitoring efforts

Examination of  
further legislation

Mobilize funds for  
coastal  
infrastructure  
(recycling, other)

Expanding  
cleaning efforts,  
PR, education,  
enforcement  
activities

# Operational Target 4 - HOTSPOTS



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention

# Hot Spots and Sensitive areas

Category B - 3 Hotspots;

Category C – 14 Sensitive areas;

**Agan Chemicals** in Ashdod. Herbicides contained in its wastewater. Outfall approximately 1 km from the coastline.

**The Shafdan WWTP** in the center. Sewage sludge from its treatment process through an outfall 5 km from the coast.

**EIL brownfield** in Haifa Bay. PVC plant which was closed in 2004, suspected to be leaching mercury and possibly other pollutants into the Haifa Bay waters.



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention

# Project Fiches

Title of the project	Objectives	Relevant Ecological Objectives		
		EO5	EO9	EO10
SHAFDAN Sewage sludge	Building a full land solution by 2/2017. prevention of BOD, TOC, Metals, Nutrients. Investment: 330 Million EU.	V	V	
AGAN chemicals	Reducing to “beyond BAT” OrganoHalogens and Herbicides		V	



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention



# EIL site Hotspot (EO9+Mercury RP)



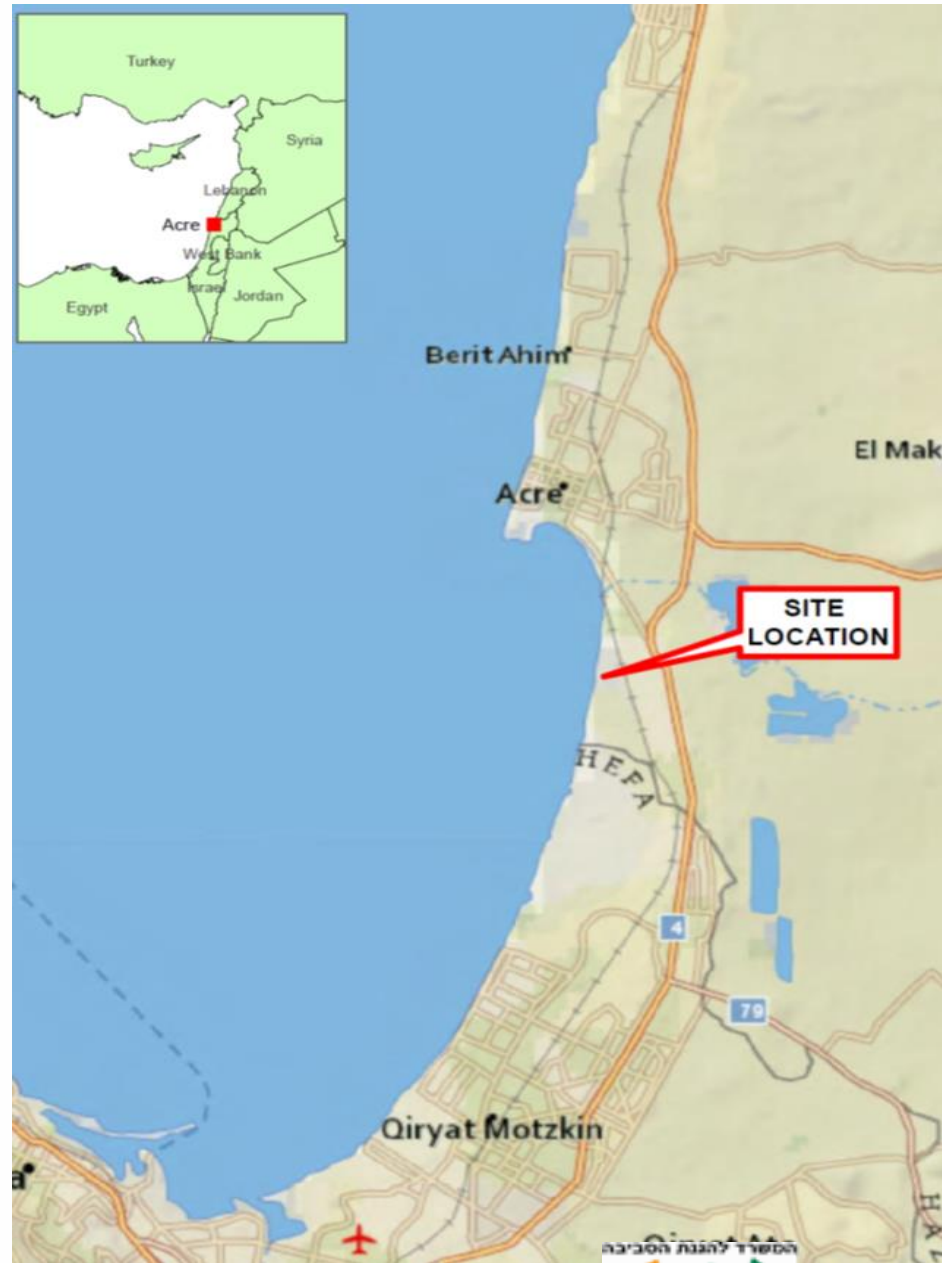
**Sinamis Tehaukho MOEP,  
Industrial wastewater and contaminated soil coordinator**



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention

# Site location

- North coast of Israel
- approximately 2.5 km south of Acre and 20 km north of Haifa







# Soil and groundwater contamination

Active: 1952-2003

production of organics (VCM, PVC) and inorganics (HCl, NaOH, KOH) products  
soil and groundwater contaminated by :  
metals (mercury), chlorinated organic compounds (PCE, TCE, VC)

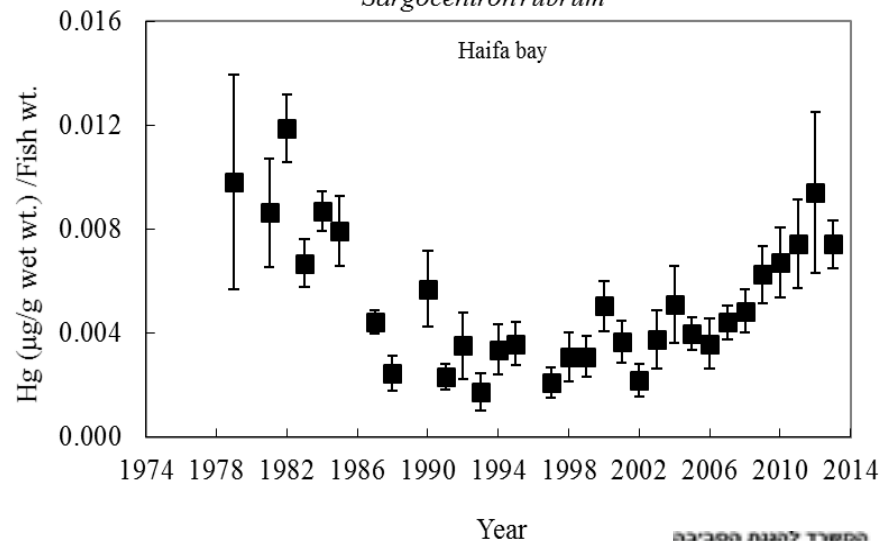
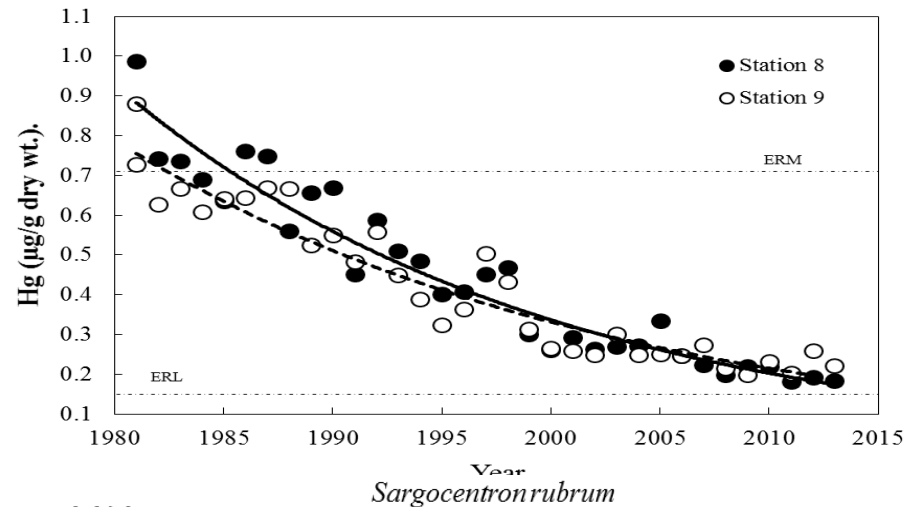




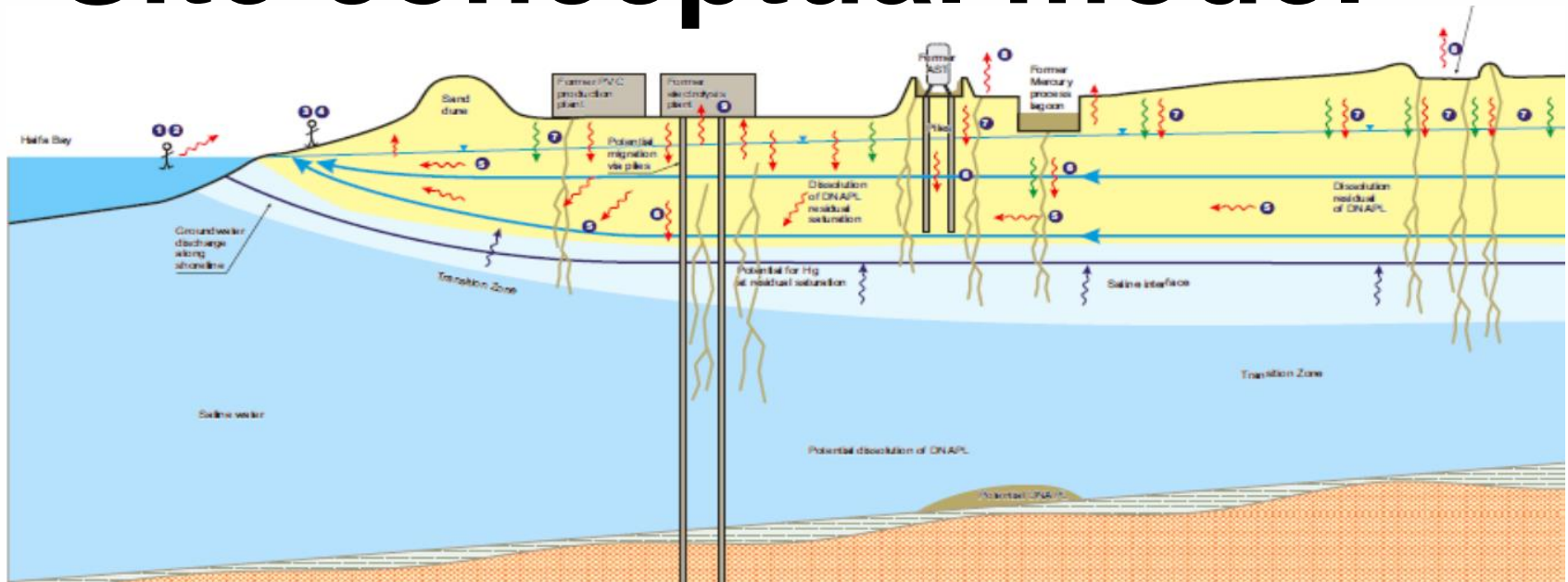
# National Marine Monitoring Program

Since the 80's mercury concentrations in the sediment are decreasing.

Increasing mercury concentration in the fish since 2003



# Site conceptual model



Groundwater used for production. The pumping wells changed the groundwater flow direction, preventing the contaminated groundwater from reaching the sea.

Since the plant ceased its activity - contaminated groundwater are suspected reaching the marine environment and food chain

# Risk based corrective action

2010-2016: gathering information by soil and groundwater investigation  
2016-2017 : risk assessment processes according to the IRBCA (Israel risk based corrective action model) remediation plan.



# **More Operational Targets are detailed in the Israeli National Action Plan**

Table 10 - lists 18 operational targets and the responsibility to execute

Table 11 - Additional requirements which are not covered yet by a detailed actions to fill in the gaps

Table 12 – lists the measures to be taken to comply with the Ecological Objectives, RP and SAP requirements



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention



# Thank you.

# Questions?



United Nations Environment Programme /  
Mediterranean Action Plan (UNEP/MAP)  
Barcelona Convention



המשרד להגנת הסביבה  
היחידה הארצית  
להגנת הסביבה הימית

**ISRAEL**

MARINE ENVIRONMENT  
PROTECTION DIVISION