

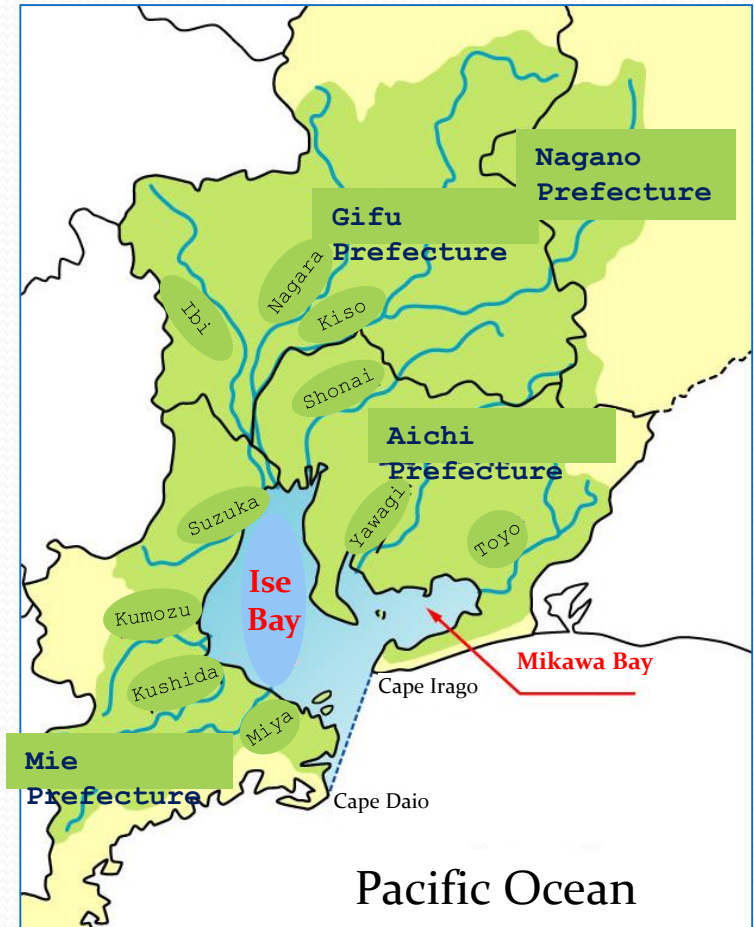
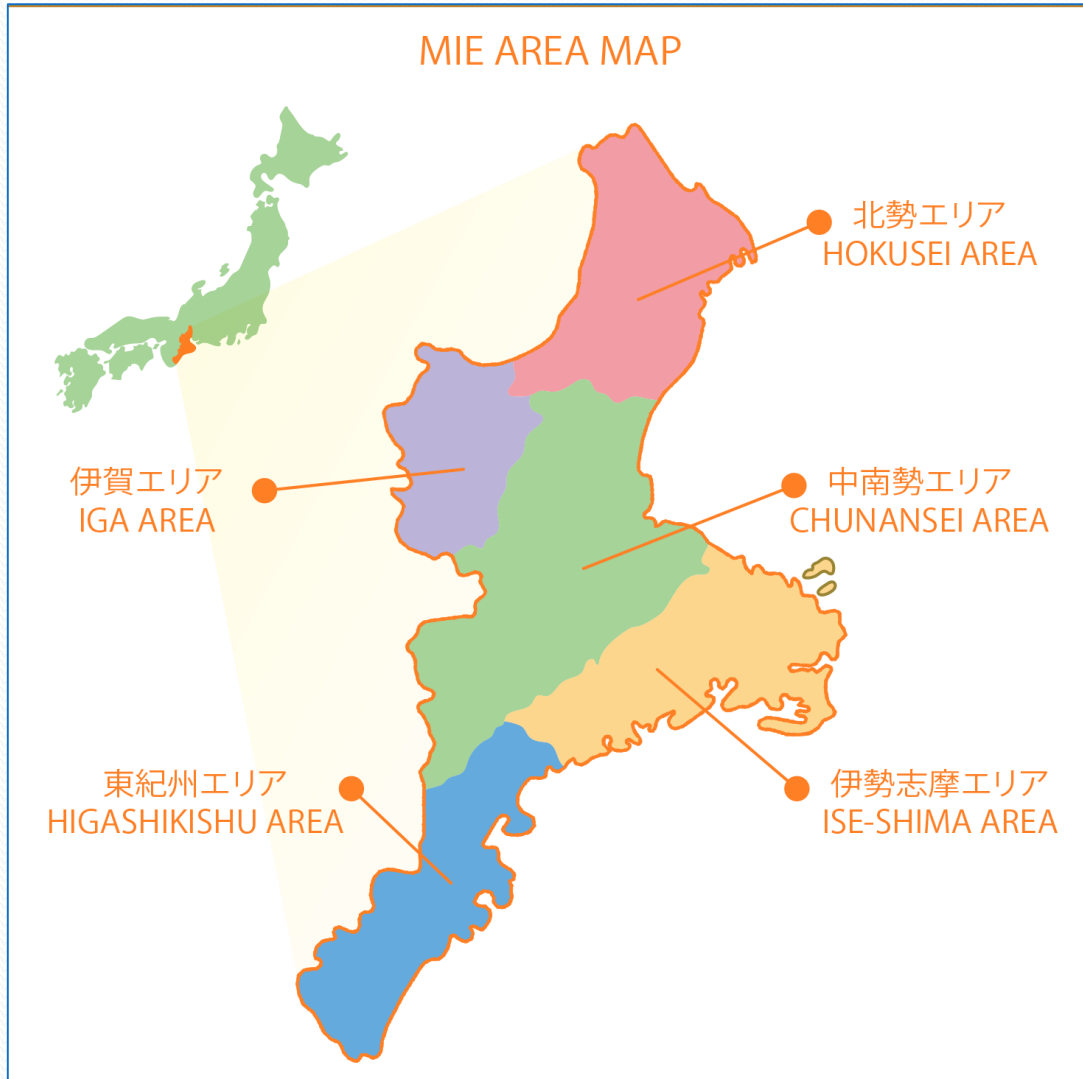


# On measures towards marine litter in Ise bay.

January 23, 2020

Mie Prefecture  
Department of Environment and Lifestyle  
Atmosphere and Water Environment Division

# Mie Prefecture and Ise Bay



Note: everything that is not specified is a river name

# Marine litter situation in Mie prefecture



City of Toba, Toshijima island  
(Nasa beach)

# Marine litter situation in Mie prefecture



City of Toba, Toshijima island (Nasa beach) October 8, 2017



Toshijima island (Nasa beach)  
October 24, 2017



Toshijima island (Momotoricho  
harbour) October 24, 2017

# Marine litter treatment promotion law

July, 2009, Marine litter treatment promotion law was officially enforced  
(Revised in June, 2019)

## Purpose

To preserve the beautiful coastal scenery and ocean and coastline environment, aimed for harmonious treatment of marine litter and waste minimization.

## Marine litter treatment promotion law points

### Harmonious treatment of marine litter etc.

Supervisors of marine problems etc., specified by the law, must take required measures for marine litter treatment. ※Marine problems supervisors: prefectural and municipal river departments, harbor departments, fisheries departments etc.

### Reduction of marine litter etc.

National and regional official organizations work to prevent illegal waste disposal, such as throwing away litter on the ground or in the rivers, and conduct research about marine pollution.

## Fiscal measures

The government must take required fiscal measures to promote marine litter treatment.

# Measures towards marine litter in Mie Prefecture

2007

2008

2009

2010

2011

◆ 「Research on policy model for reducing marine litter in the country」 (Ministry of the Environment 2007-2009)  
Toshijima area in Mie prefecture selected as test area.  
A fact-finding survey on marine litter carried out

◆ Conference in Toshijima, Marine Litter Summit (Oct.2008)

◆ Marine litter treatment promotion law (officially enforced in July 2009)

◆ Green New Deal financial endowment in the area (Ministry of the Environment 2009~2011)

# Measures towards marine litter in Mie Prefecture

2009

2010

2011

2012

2013

◆ Green New Deal financial endowment in the area  
( Ministry of the Environment 2009~2011)

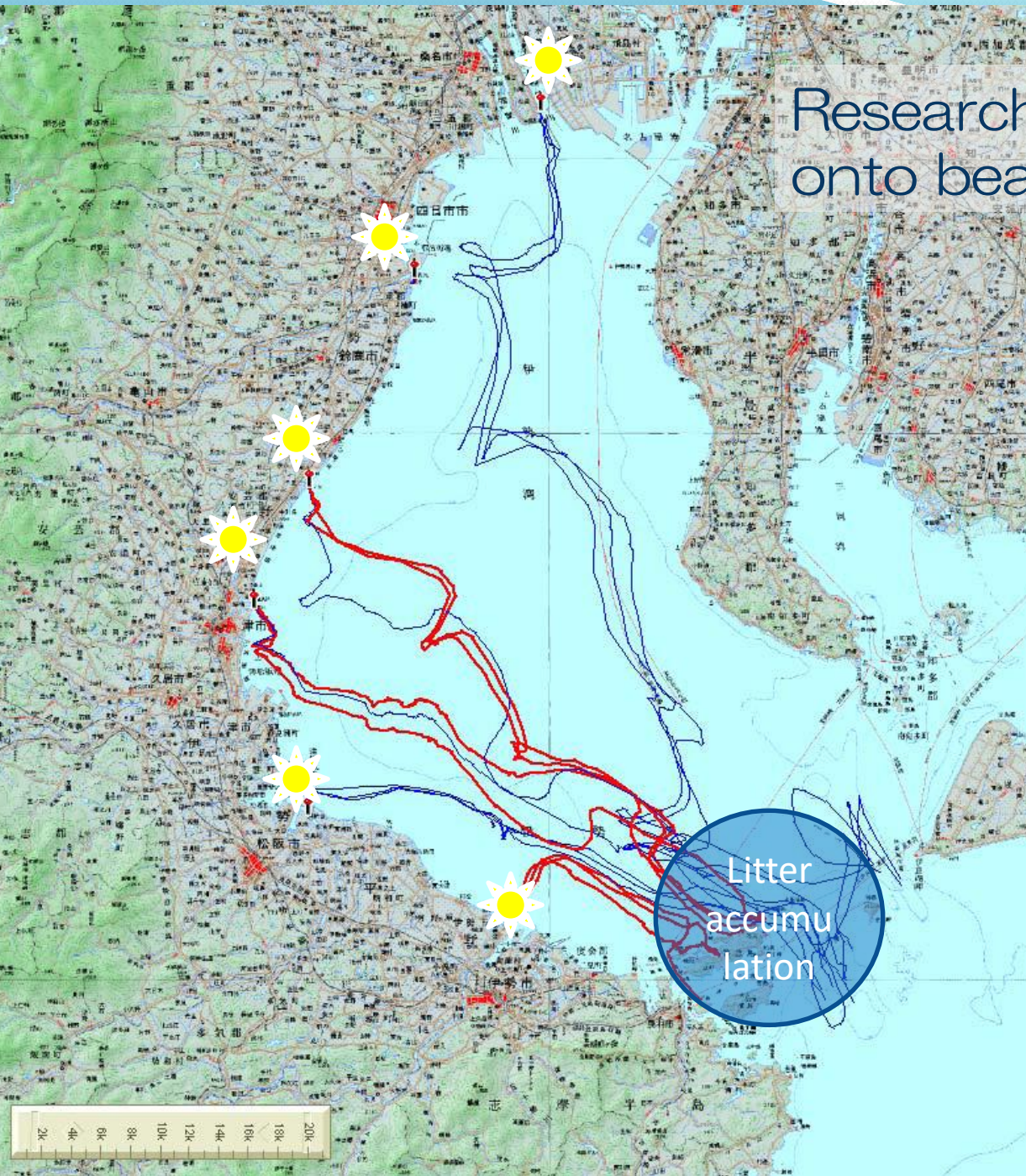
◆ Survey on general marine litter situation (Mie pref., 93 beaches)  
Detailed survey on marine litter (Ise bay, 14 beaches)  
Survey on current state of litter in rivers (Ise bay, 21 rivers) etc  
(2009~2010)

◆ Conference on promoting marine litter treatment in Mie  
(2010.10~) ; Area workshop (2010.9~

◆ Plan on promoting marine litter treatment in Mie  
prefecture (2012.3)

◆ Review meeting on marine litter treatment  
(Tokai 3 prefectures, 1 city, 2012.4)

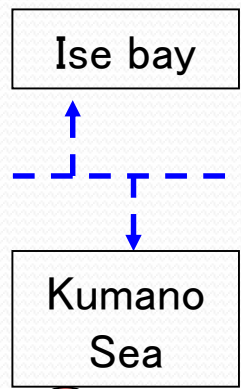
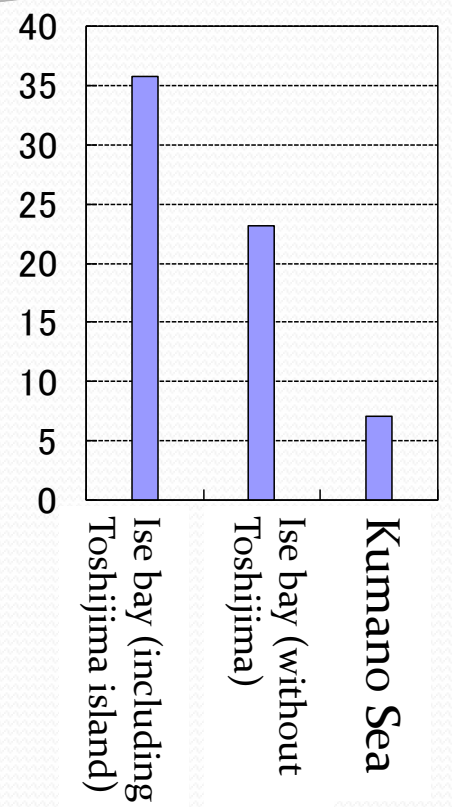
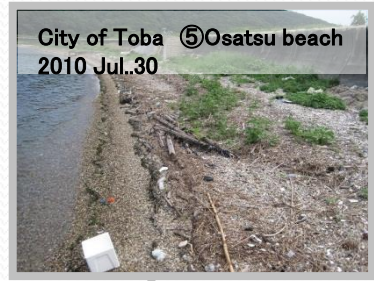
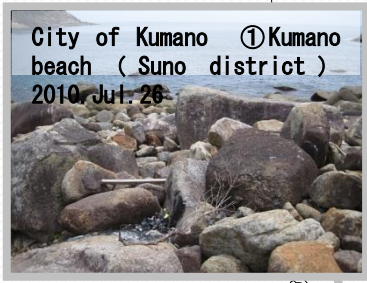
# Research on bottles washed onto beachline (2008)



A survey was carried out to find out paths of litter drifting and percentage of it washed into the ocean. To do that, drifting bottles with special transmitting devices were released from the mouths of 6 rivers within Mie prefecture.



# General survey on marine litter situation (2010)



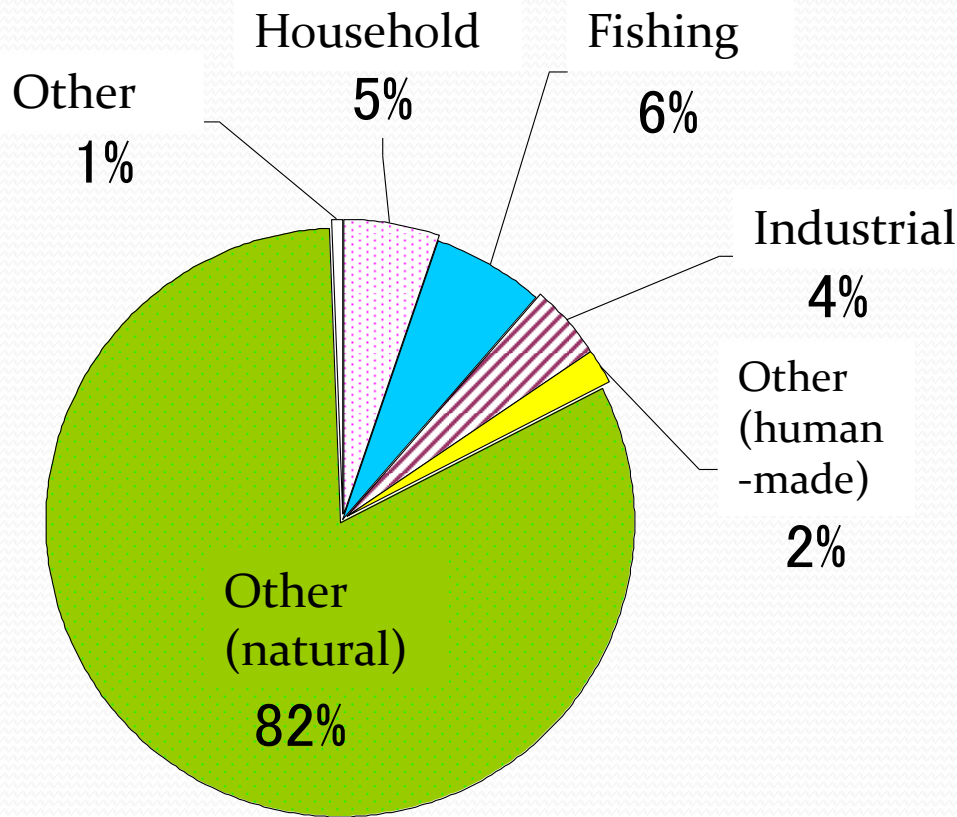
- : >32bags/10m
- : 8~16bags/10m
- : 2~4bags/10m
- : 1/2~1bags/10m

Average value of litter volume by the area (liter/10m)

# Detailed survey on marine litter (2009-2010)



# Types of marine litter



✂ Average value of 8 times repeated survey (weight ratio)

Types of beach litter	
Household	Drinking plastic bottles
	Food packages/containers
	Daily necessities
	Cap and covers
	Various bags (excluding the agricultural)
	Drinking cans
	Shoes/sandals
	Sapling pots
	Drinking glass bottles
	Various toys
	Lighters
	Other household items
Fishing	Styrofoam floats
	Ropes/cords
	Buoys
	Pipes for oyster farming
	Other fishing items
Industrial	Wood
	Pesticides/fertilizer bags
	Other industrial items
Other	Natural
	Bush
	Driftwood
	Human-made
	Hard plastic fragments
	Styrofoam fragments
	Plastic sheets or bags fragments
Glass or ceramic fragments	
Metal fragments	
Other	

# Measures of collecting/handling the litter



Volunteer cleanup activity (14 October 2019)



Watershed management authorities cleanup activity (24 October 2019)



# Measures of waste minimization in Mie

2013

2014

2015

2016

2017

2018

2019

◆ Local marine litter treatment promotion project (funded project)

◆ Local marine litter treatment promotion project (subsidiary project)

Distribution of educational DVD

(2013)

Trains and buses with wrap advertisement

Cinema advertising

Educational campaign

Educational display items

(2014)

Cinema advertising

Educational TV programs

(2015)

Cinema advertising

(2016) Marine litter Summit

(2017)

Monitoring survey

Educational campaign

(2018)

Cinema advertising

WEB Video Streaming

(2013~ ) Marine litter monitoring survey for the purpose of waste reduction

Raising public awareness

# Litter floating in sea and washed ashore in Ise bay

## ○ Marine litter



▲ Litter washed ashore from the sea

### Coastline litter problem

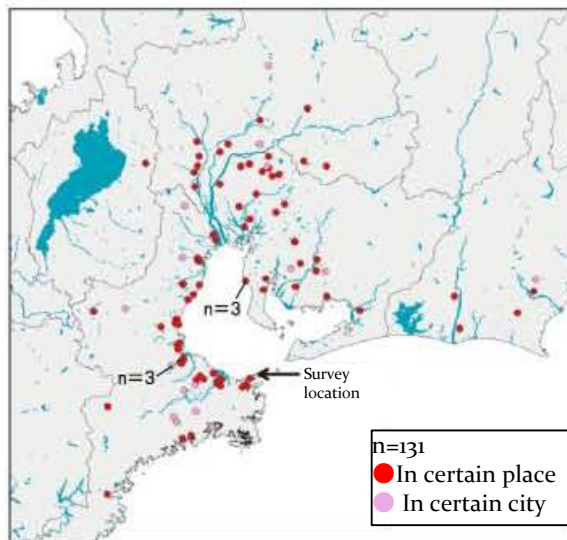
- ▽ Degradation of nature attractions
- ▽ Litter caught during fishing
- ▽ Animals may swallow it or get stuck in it
- ▽ Very much time- and money-consuming labor to collect and dispose of it all



▲ A seabird swallowed a loose fish hook

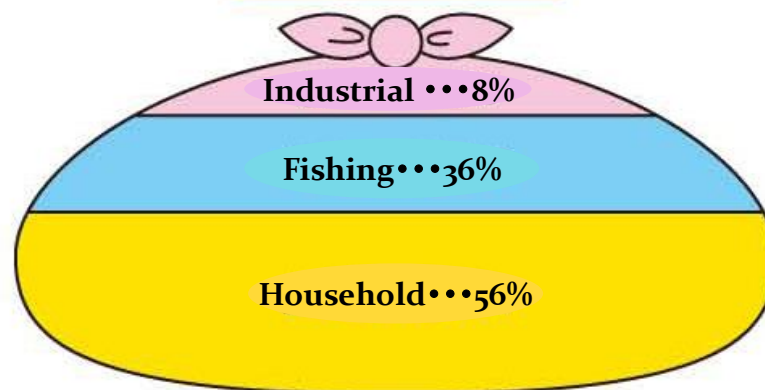
Results of a survey on litter washed onto coasts revealed that the coastline litter is disposed of in places remote from the sea and that it mostly consists of household trash. In particular, PET bottles, food packages, containers, caps and covers, daily necessities, various bags, empty cans, shoes and sandals, sapling pots, glass jars, toys and more types of things are plenty.

### Estimated places of disposal of lighters washed onto the beach of Toshi island



Source: Ministry of the Environment 「Survey of policy model for domestic marine litter reduction」 review meeting materials.

### Types of coastline litter



Schemed results of a survey in 7 prefectures and 1 coastline. However, it excludes broken pieces of plastic, etc.

Source: Ministry of the Environment brochure 「Think about marine litter. What to do to save our seas?」

# Marine litter treatment promotion –Wide cooperation (Tokai 3 prefectures, 1 city)-

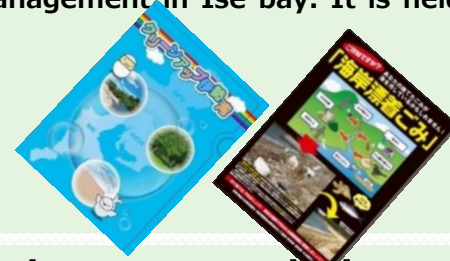
## 「Tokai 3 prefectures, 1 city prefectural governors and mayors conference」



- January 2012, suggestion from Mie pref. to work cooperatively on watershed management
- February, 2012, Tokai 3 prefectures, 1 city mutually agreed to work in cooperation

## Making and distributing goods for raising awareness, local workshop

- This workshop's purpose was understanding present situation in watershed management in Ise bay. It is held annually since 2015.



## Carrying out 「Review meeting on marine litter Countermeasures」

- First Review meeting on marine litter treatment was carried out in April 2012
- Annual meetings since 2012



## Propositions and recommendations for the country

- Suggestions are sent to the Ministry from the Conference on integrative measures in Ise bay
- It was held 6 times since 2012
- Lower burden on municipality with stable subsidy-based budget



### Contribution to Ministry's 「Project of measures model for waste reduction through municipalities cooperation」

#### 2018-2020 (3-year period)

Select key areas for Ise bay watershed management (Mie,Aichi,Gifu)

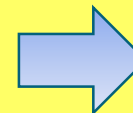
- **Understanding current situation with marine litter**  
fact-finding surveys on land, in rivers and in the sea
- **Measures for waste reduction**(implementation of 3Rs, cleanup activities, raising public awareness, etc.) → **observe the result**

#### ■ Aim of the Ministry of the Environment

Promote wide-range waste reduction on internal islands and beaches

Marine litter

Watershed management research · cooperation with neighboring prefectures



To continue an efficient and successful promotion of marine litter treatment in Ise bay **tight cooperation with watershed managing municipalities** is important.

# Thank you for your attention



January 14, 2019  
Marine Litter Problem Symposium

To protect the beautiful nature of Mie prefecture, we are continuously working on improvement in dealing with marine litter.