

Improving knowledge for adaptation to climate change

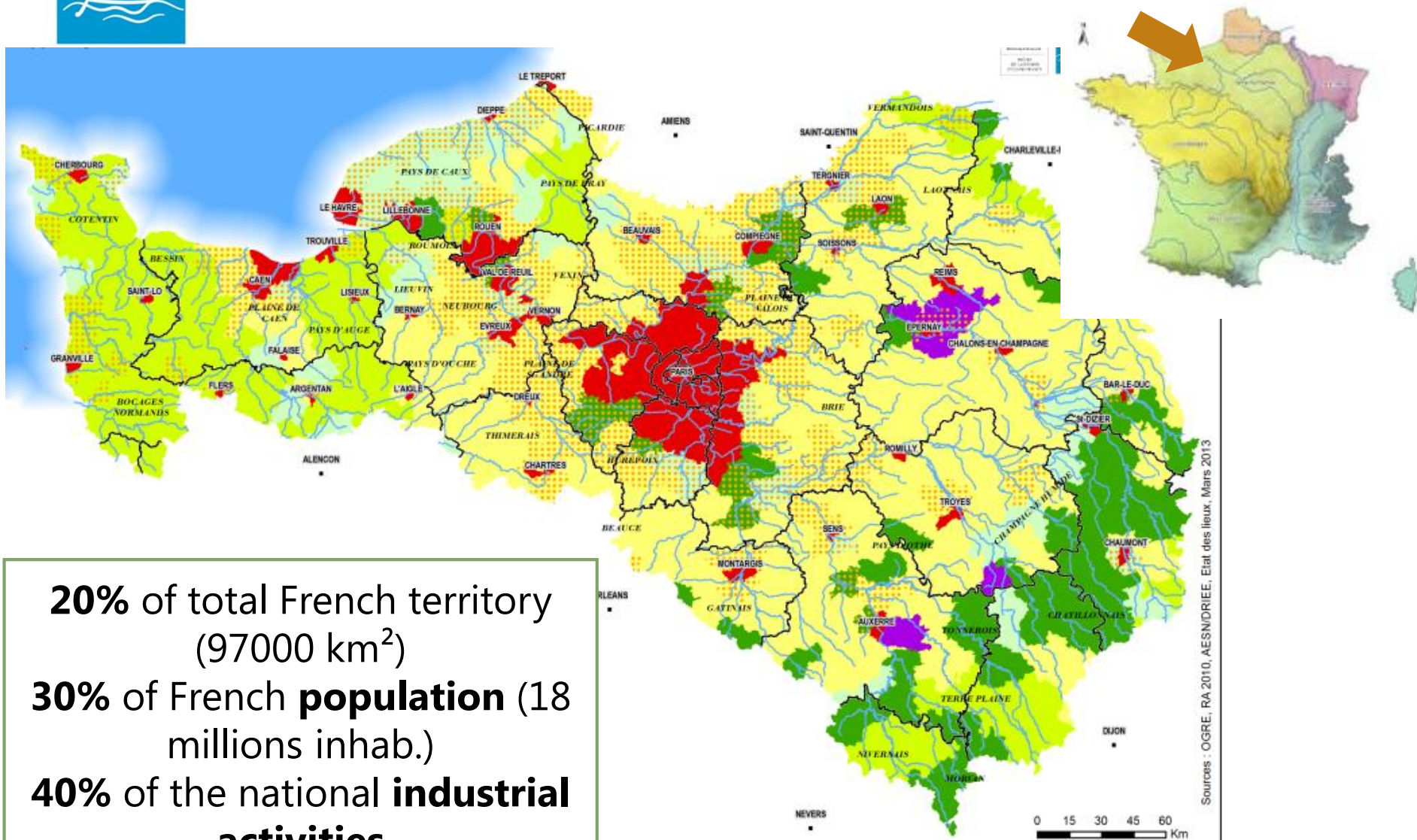
**Patricia BLANC, Director General
The Seine-Normandy Water Agency**

Water and Climate
Meeting of the Great Rivers of the World
Rome, 23-25 October 2017





The Seine-Normandy River Basin



20% of total French territory
(97000 km²)

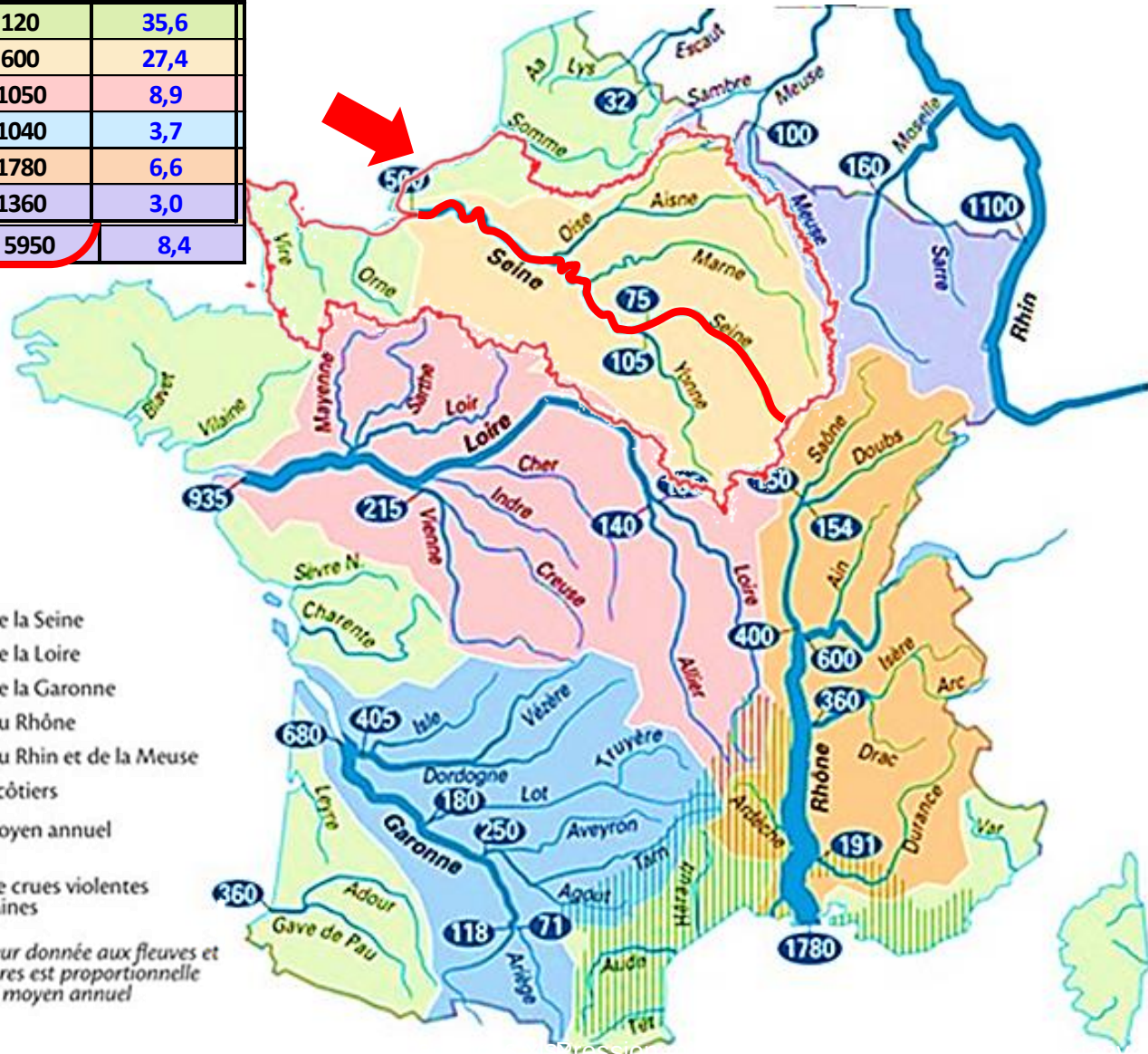
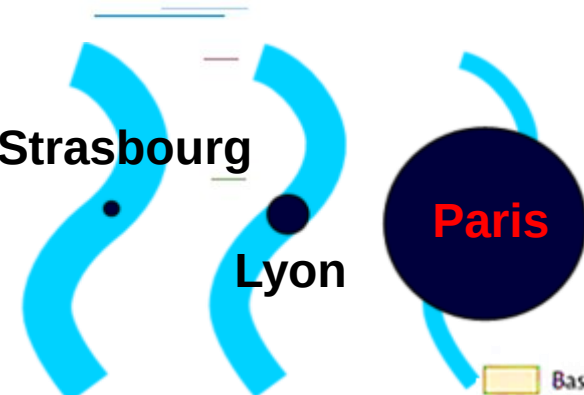
30% of French **population** (18
millions inhab.)

40% of the national **industrial
activities**

60% of its area covered by
agriculture

The Seine-Normandy River Basin

AE	Pop. M.hbts	Pop. ANC	Pop. AC	Q(m3/s)	Pop AC/Q
AP	4,7	0,43	4,27	120	35,6
SN	18,2	1,78	16,43	600	27,4
LB	13	3,65	9,35	1050	8,9
AG	7	3,13	3,88	1040	3,7
RM&C	14	2,19	11,81	1780	6,6
RM	4,3	0,29	4,01	1360	3,0
France	61,2	11,46	49,74	5950	8,4



- Bassin de la Seine
- Bassin de la Loire
- Bassin de la Garonne
- Bassin du Rhône
- Bassin du Rhin et de la Meuse
- Fleuves côtiers

500 Débit moyen annuel en m³/s

Zones de crues violentes et soudaines

L'épaisseur donnée aux fleuves et aux rivières est proportionnelle au débit moyen annuel

Climate change and water within the Seine-Normandy River Basin, what we know

Increase of around **2°C** of surface water by 2100

Reduction of rainfalls by around **12%** by 2100

Increase of evapo-transpiration around **16%** by 2050
and around **23%** by 2100

Reduction of water flows by **10** to **30%** by 2070-2100

Reduction of groundwater recharge by around **16%** by
2050 and around **30%** by 2100

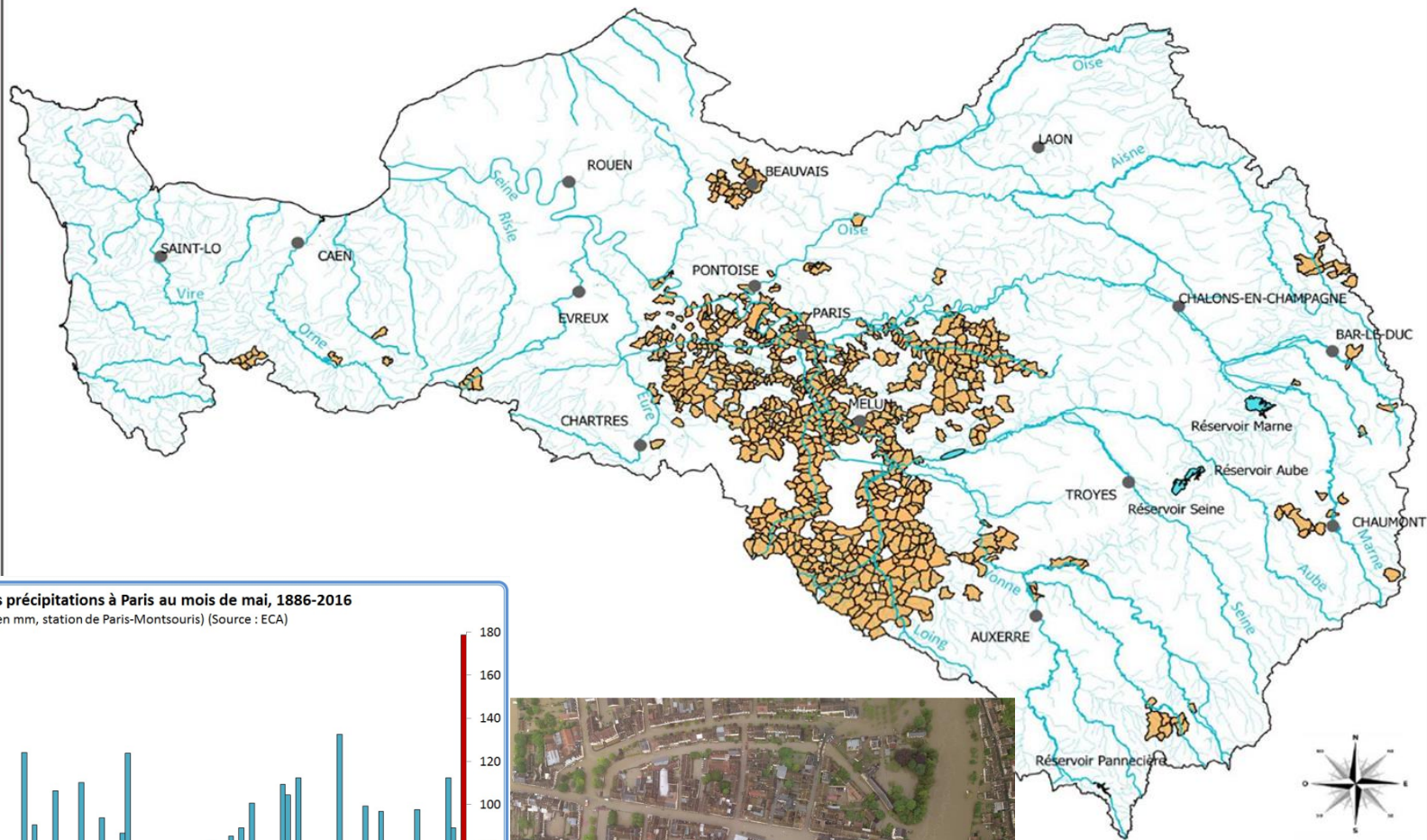
Uncertainties about the impact on floods



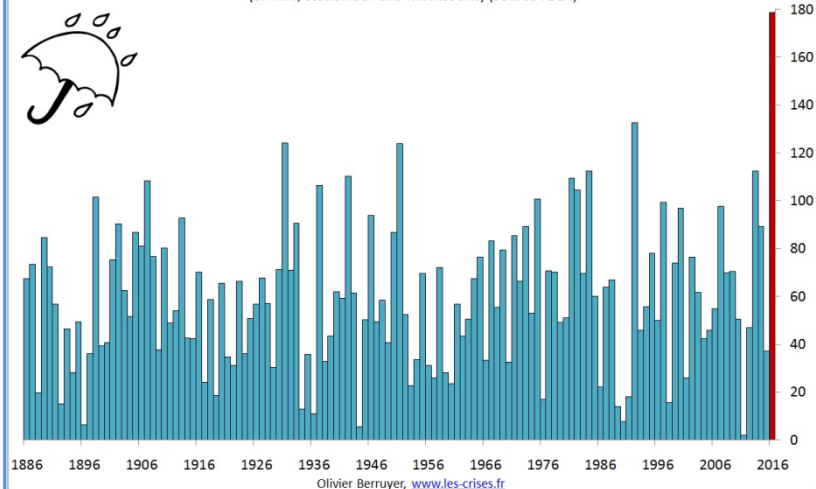
Risks for SN
territories
and
population

An exceptional flood in the Seine in June 2016

ARRETES CAT NAT (Inondation et coulées de boues 9 et 16 juin 2016)



Cumul des précipitations à Paris au mois de mai, 1886-2016
(en mm, station de Paris-Montsouris) (Source : ECA)



From project to commitment



We must not let uncertainty stop us from acting !



Thank you for your attention

<http://www.eau-seine-normandie.fr/domaines-d-action/adaptation-au-changement-climatique/engagement>

