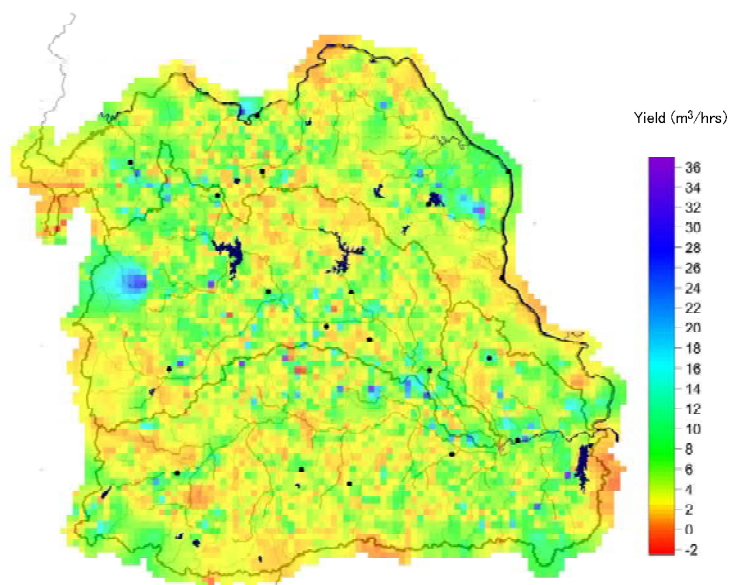
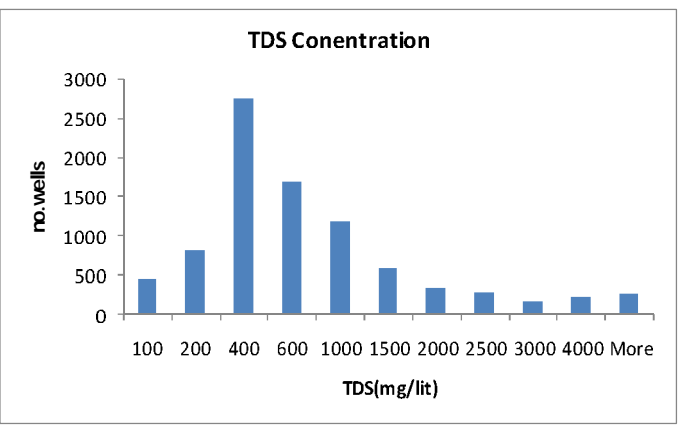
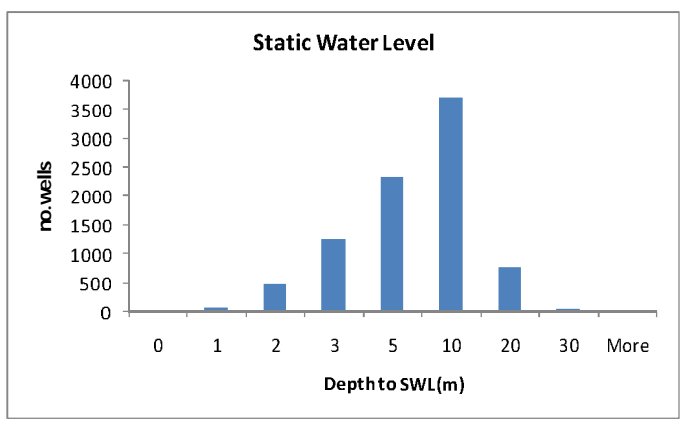
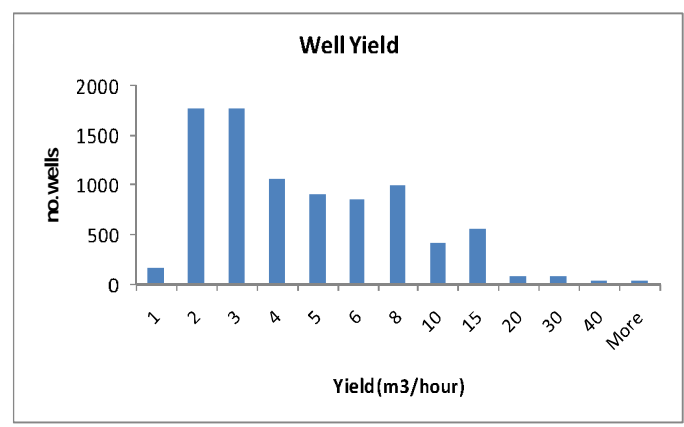


Hydrogeologic Map of Northeast Region



Well Yield of Northeast Region



Note: Hydrogeologic Map is drawn based on DGR GIS data ,and well data is arranged by DGR inventory data carried out with the compilation of 1:50000 map of North East Hydrology.

7-4 Hydrogeologic Characteristics of Northeast Region

Note:
Data Source: Processed by JICA study Team using DGR data

Date: September 2010

LEGEND

- Flood plain Deposits Aquifer
 - Terrace Deposits Aquifers
 - Tertiary-Cretaceous(Phu Thok)Aquifer
 - Cretaceous(Phu Thok/Maha Sarakham)Aquifers
 - Cretaceous(Maha Sarakham)Aquifers
 - Cretaceous(Knok Kruat)Aquifers
 - Cretaceous(Phu Phan)Aquifers
 - Cretaceous-Jurassic(Sao Khua)Aquifers
 - Jurassic(Phra Wihan)Aquifers
 - Jurassic(Phu Kradung)Aquifers
 - Jurassic(Namphong)Aquifers
 - Jurassic(Upper Khorat)Aquifer
 - Jurassic(Middle Khorat)Aquifer
 - Jurassic(Lower Khorat)Aquifer
 - Permian(Nam Duk)Aquifers
 - Triassic(Huai Hin Lat)Aquifers
 - Permian Carbonate Aquifer
 - Permian-Carboniferous Metasedments Aquifer
 - Triassic Metasedments Aquifers
 - Devonian Aquifers
 - Carboniferous Aquifers
 - Silurian Aquifers
 - Silurian-Devonian Metamorphic Aquifer
 - Clastic Sediment Aquifers
 - Volcanic Aquifer
 - Basaltic Aquifers
 - Igneous Aquifers
 - Granitic Aquifer
 - Water body
-
- Basin Boundary
 - Faults / Structure
 - Province Capital
 - River
 - Water Body

Survey on Basic Data – Information Collection and Confirmation on Water Resources Management in Northeast Region of Thailand



7-5

Well and Hydrogeologic Information of Khong, Chi and Mun Basin




Note:





Data Source: Processed by JICA study Team using DGR data

Date: September 2010



LEGEND





Depth to Groundwater Level

-  > 5 m
-  3-5 m
-  < 3 m









-  Basin Boundary
-  Province Capital
-  River
-  Water Body

TDS Concentration

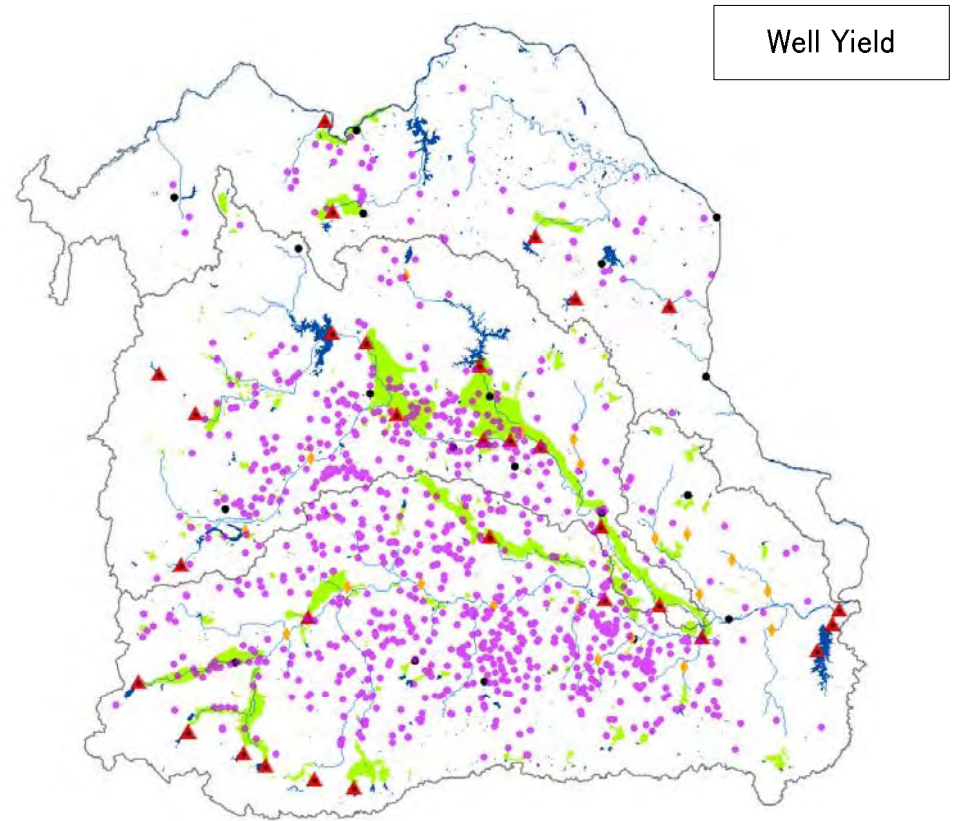
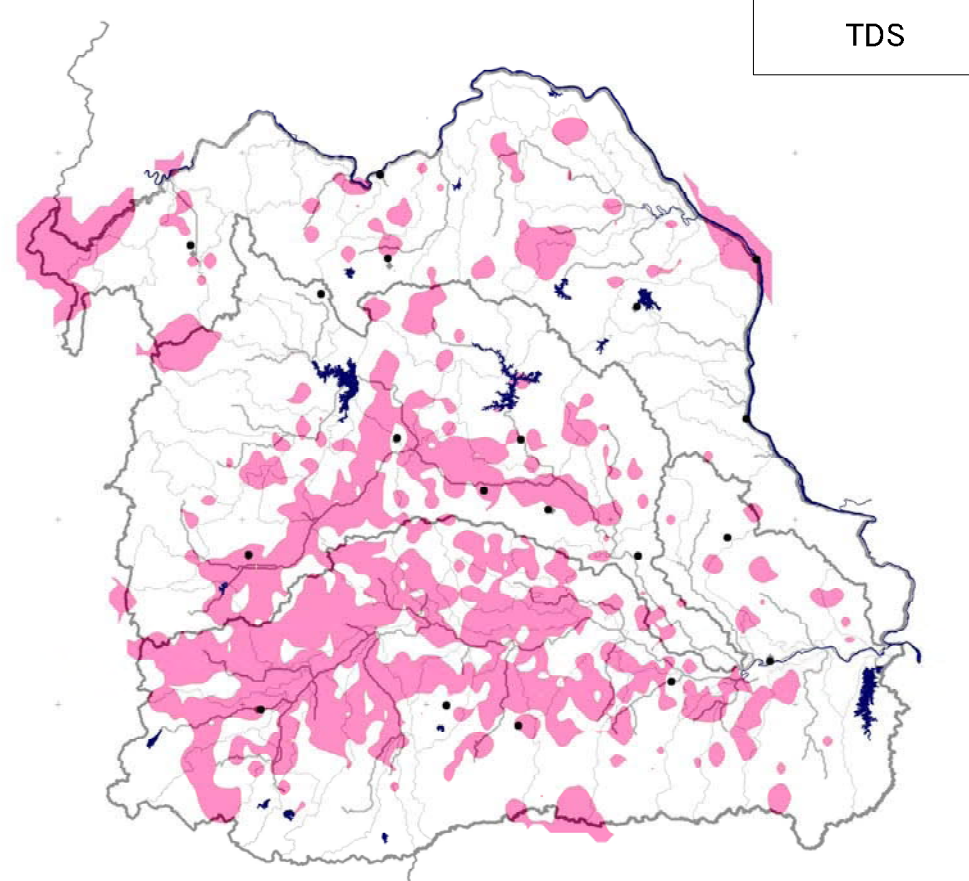
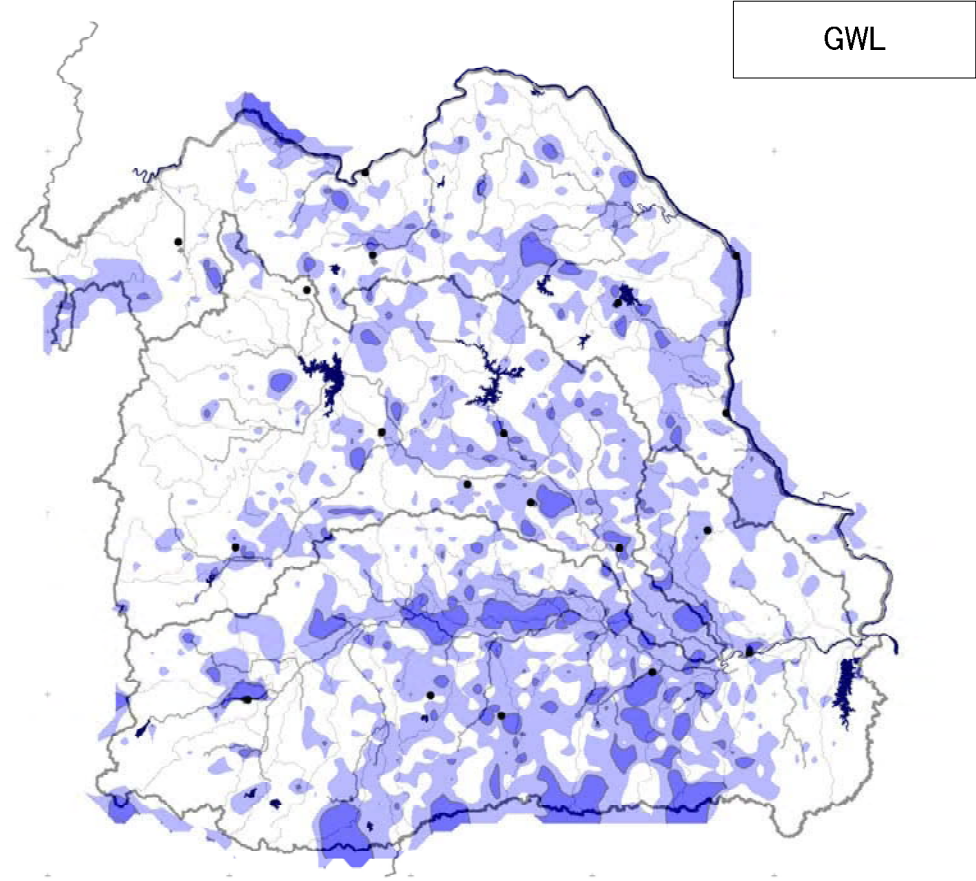
-  < 1000 mg/lit
-  > 1000 mg/lit

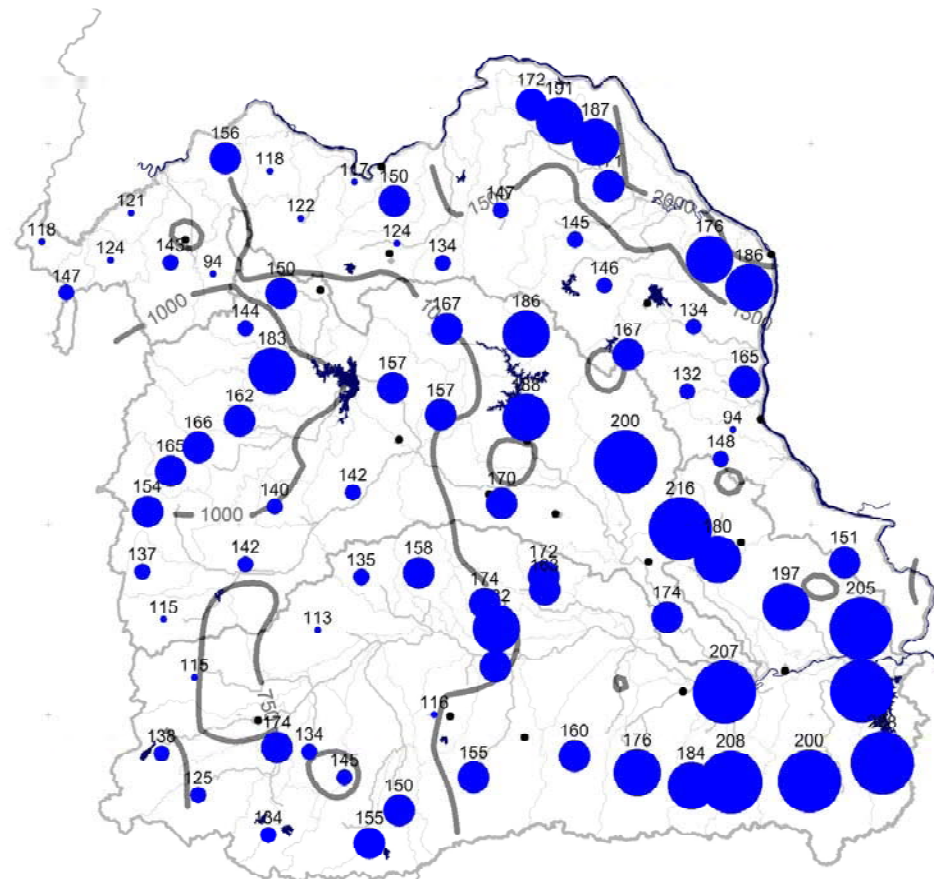
-  Basin Boundary
-  Province Capital
-  River
-  Water Body

Well Yield

-  GW <5m, TDS>=1000mg/l
-  RID Large scale project
-  Major Weir
-  Existing Irrigation Area
-  Basin Boundary
-  Province Capital
-  River
-  Water Body

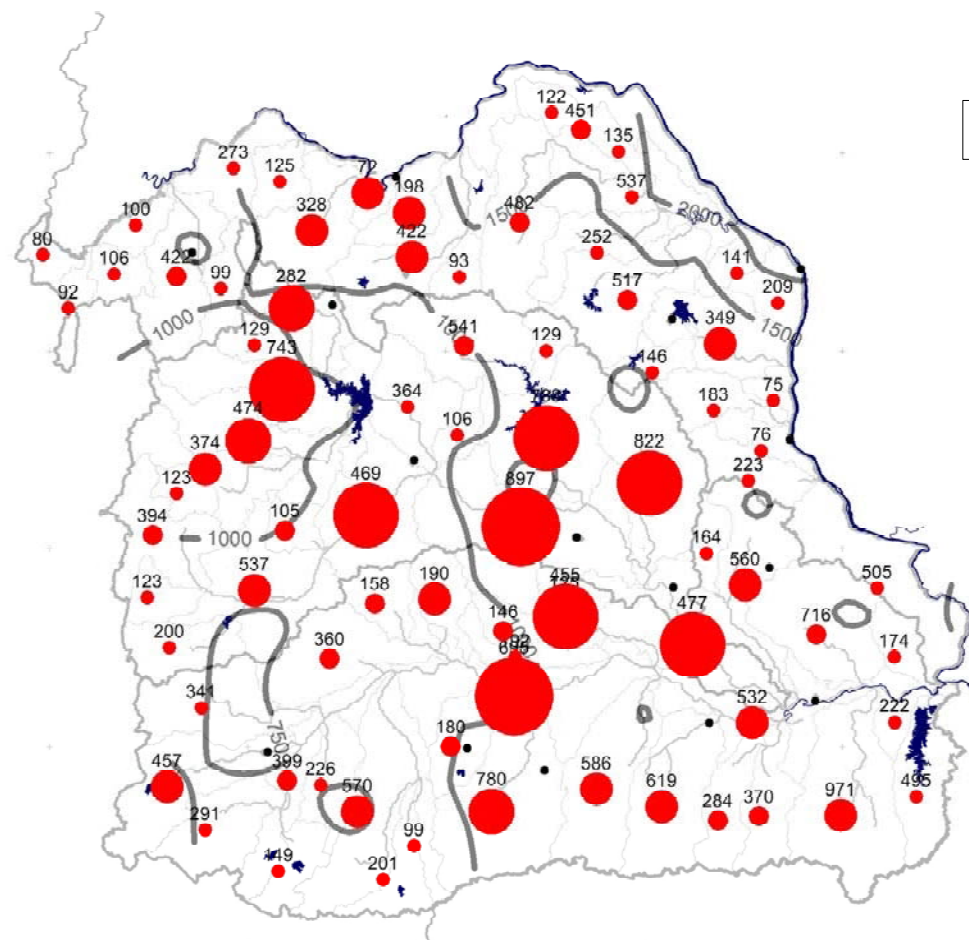
Well and Hydrologic Information (DGR 1999)





Infiltration

Note: Groundwater Infiltration is estimated by Study team with referenced to area rainfall, DGR' s basin-wide data and aquifer storage capacity.



Withdraw

Note: Groundwater Withdrawal is estimated based on DGR' s basin-wide data. The allocation for sub-basin is followed by density of wells.

7-6

Groundwater Infiltration and Withdraw of Khong, Chi and Mun Basin

Note:

Data Source: Processed by JICA study Team using DGR data

Date: September 2010

LEGEND

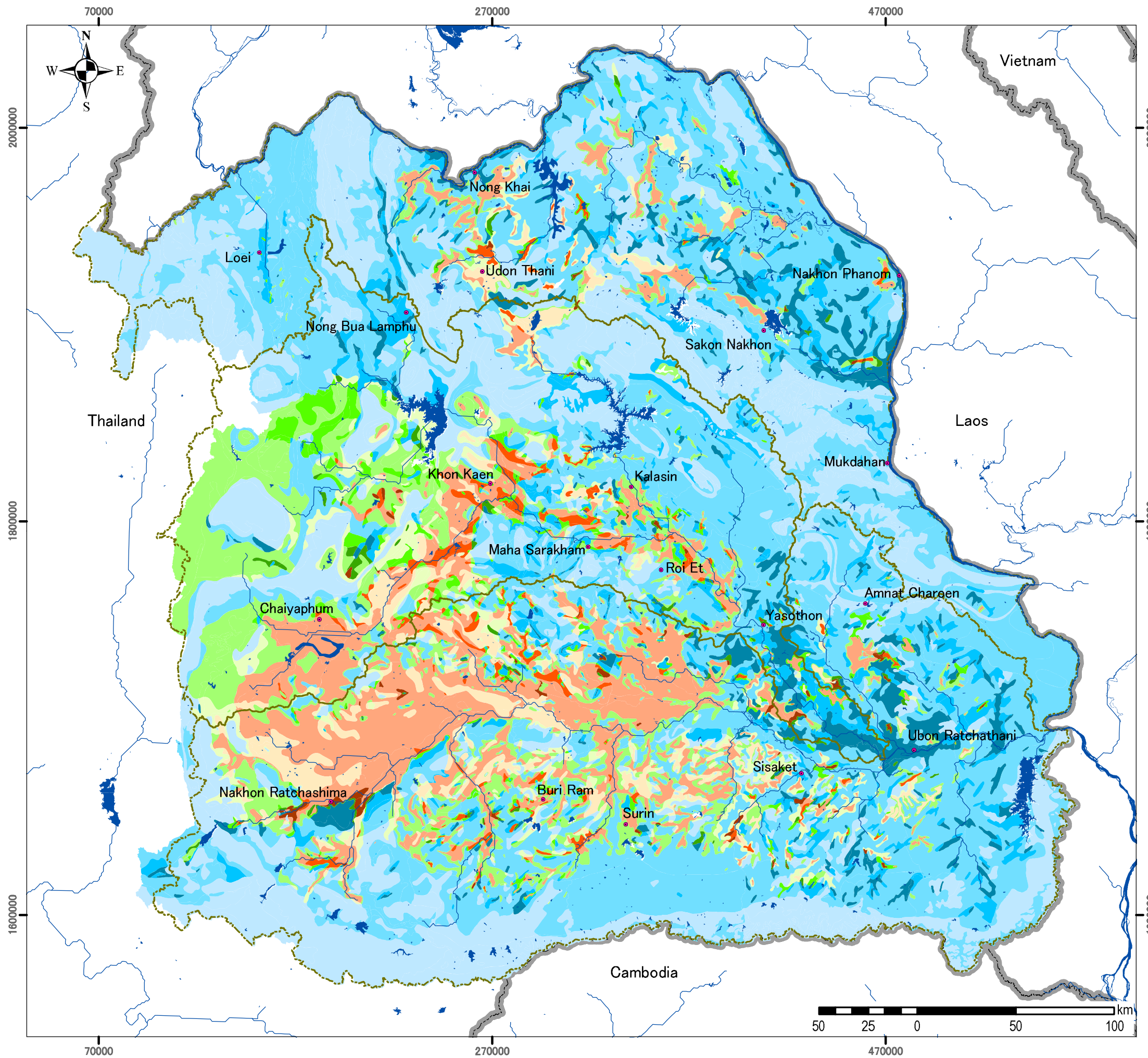
Groundwater Infiltration

- > 125 mm/year
- 125–150 mm/year
- 150–175 mm/year
- 175–200 mm/year
- <200 mm/year

- 1000 Isohyets of Rainfall (wet season)
- Basin Boundary
- Province Capital
- River
- Water Body

Groundwater Withdraw

- MCM/year



7-7
Groundwater Quality Map of Northeast Region

Note:
 Data Source: Department of Groundwater Resources, Ministry of Industry

Date: September 2010

LEGEND

TDS(mg/L), Yield(m ³ /hr)	
Dark Green	750-1500, >20
Light Green	750-1500, 10-20
Yellow-Green	750-1500, 2-10
Yellow	750-1500, <2
Dark Blue	<750, >20
Light Blue	<750, 10-20
Very Light Blue	<750, 2-10
White	<750, <2
Dark Red	>1500, >20
Orange	>1500, 10-20
Light Orange	>1500, 2-10
Yellow-Orange	>1500, <2
Grey Box	International Boundary
Dashed Box	Basin Boundary
Blue Line	Rivers

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 on Water Resources Management
 in Northeast Region of Thailand

