

- Census Variables Used:
- Low Income
  - Age (0-7, 75+)
  - Long Term Limiting Illness
  - Not in Good Health
  - Unpaid Care (50+ Hours)
  - Single Parent Households
  - Gender (Females)
  - Population by Area

(Source: Office of National Statistics (ONS))



Title

## Royal Borough of Kingston Social Vulnerability Map

- Legend
- Areas of Extreme Vulnerability
  - Social Vulnerability**
  - Lowest
  - Moderate
  - Highest

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

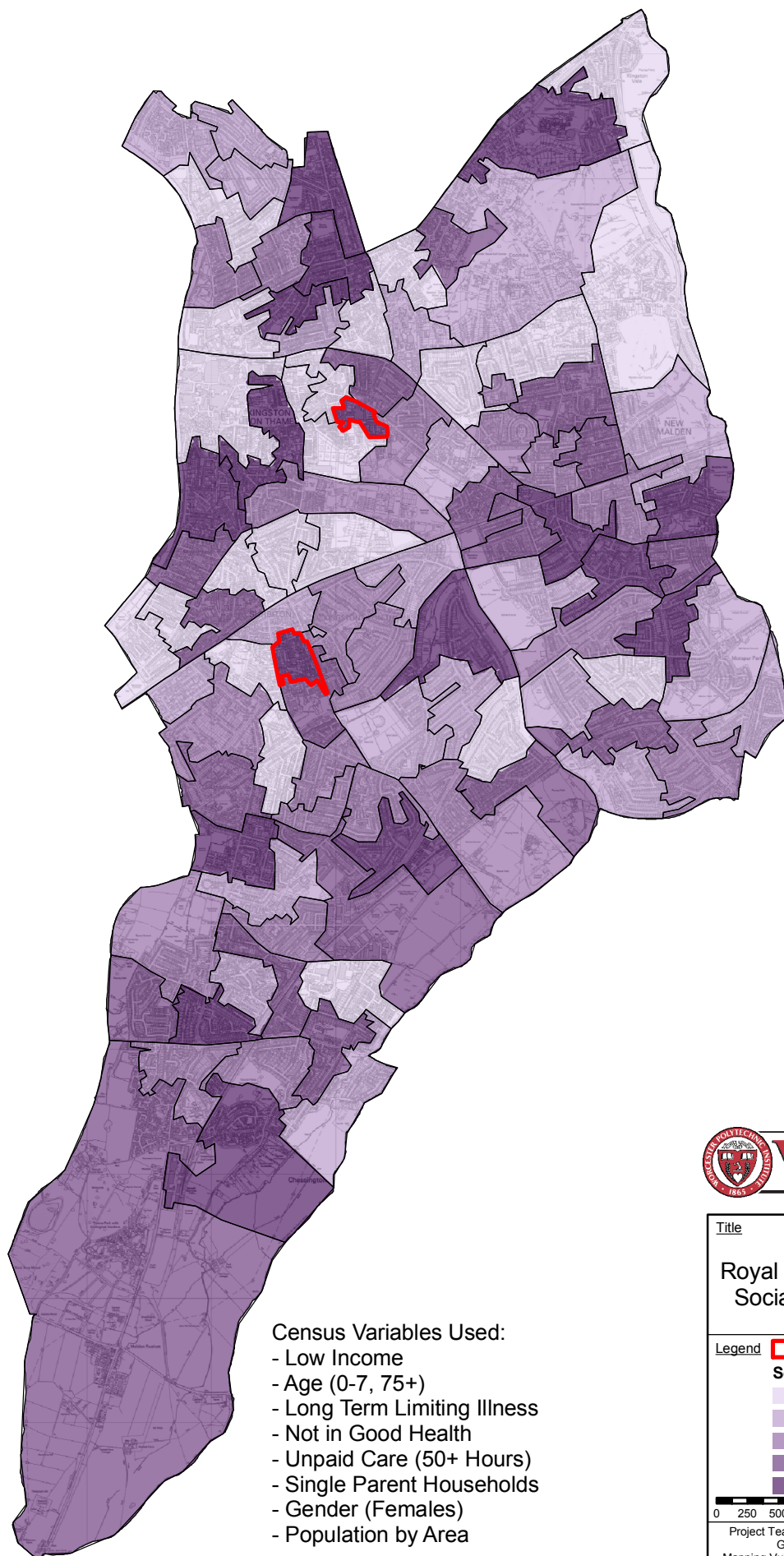
Operator: KPT

Date: 29 April 2010

Dwn: soc\_vul\_1



1:50,000



**Census Variables Used:**

- Low Income
- Age (0-7, 75+)
- Long Term Limiting Illness
- Not in Good Health
- Unpaid Care (50+ Hours)
- Single Parent Households
- Gender (Females)
- Population by Area

(Source: Office of National Statistics (ONS))



Title

**Royal Borough of Kingston  
Social Vulnerability Map**

**Legend**   Areas of Extreme Vulnerability

**Social Vulnerability**

- Lowest
- Moderate
- Highest

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

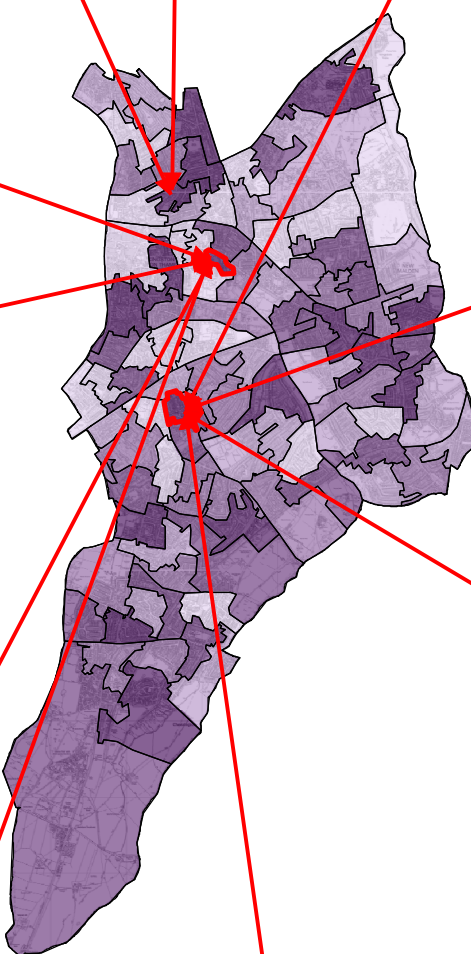
Date: 29 April 2010

Dwn: soc\_vul\_2

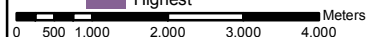
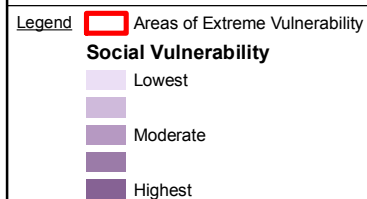


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# Title Royal Borough of Kingston Social Vulnerability Map



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Loddell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

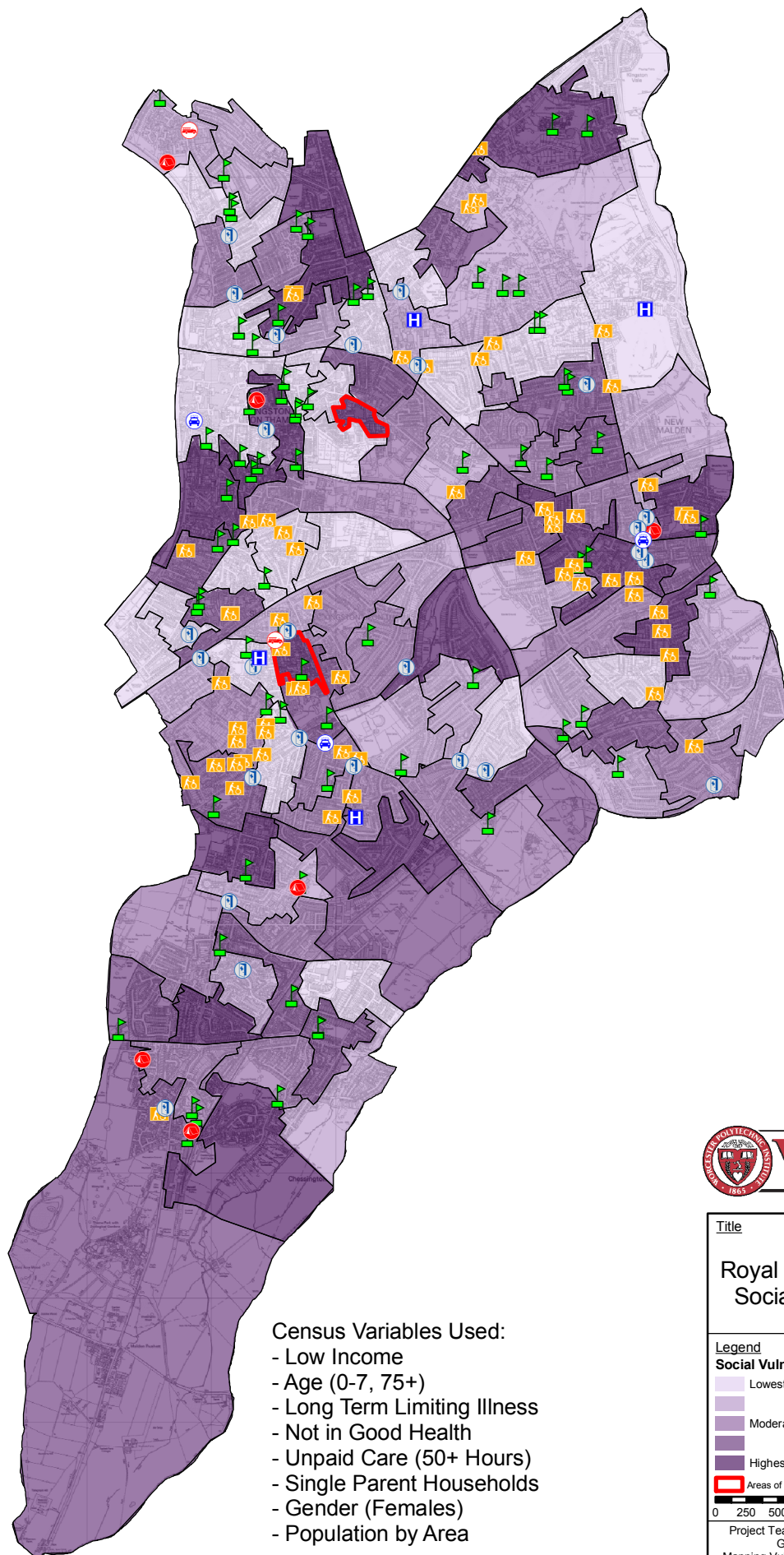
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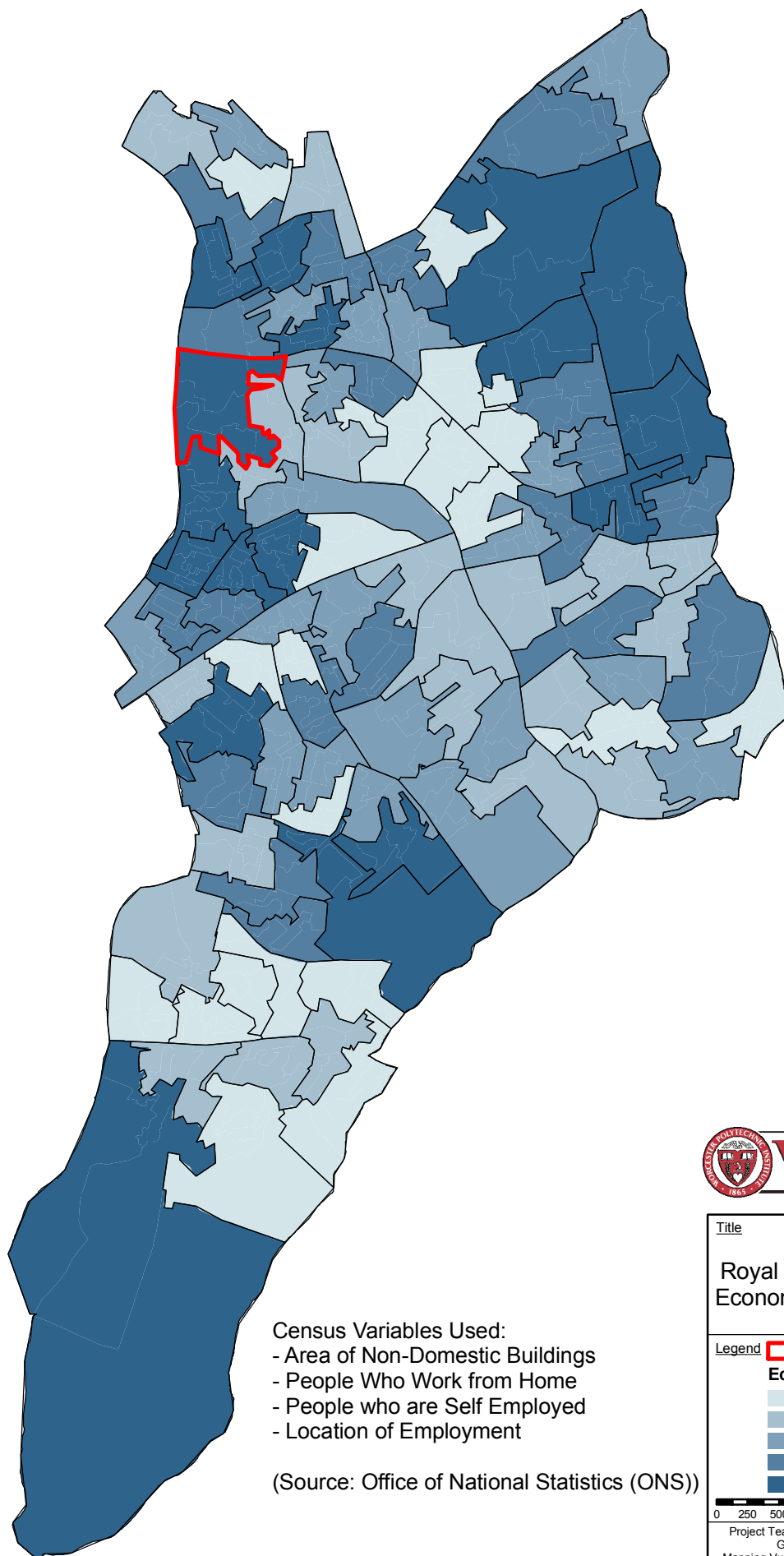
#### Census Variables Used:

- Low Income
- Age (0-7, 75+)
- Long Term Limiting Illness
- Not in Good Health
- Unpaid Care (50+ Hours)
- Single Parent Households
- Gender (Females)
- Population by Area

(Source: Office of National Statistics (ONS))



Title	
Royal Borough of Kingston Social Vulnerability Map	
Legend	
<b>Social Vulnerability</b>	
Lowest	Fire Stations
Moderate	Police Stations
Highest	Hospitals
Areas of Extreme Vulnerability	Medical Centres
	Rest Centres
	Community Care
	Education Facilities
0 250 500 1,000 1,500 2,000 Meters	
Project Team: James D'Entremont, Jacob Grzyb, Gregory Lobbell, & Brijen Patel Mapping Vulnerability to Climate Change in the RBK Worcester Polytechnic Institute / IQP	
Operator: KPT	 1:50,000
Date: 29 April 2010	
Dwn: soc_vul_4	



Census Variables Used:


- Area of Non-Domestic Buildings
- People Who Work from Home
- People who are Self Employed
- Location of Employment

(Source: Office of National Statistics (ONS))






Title

## Royal Borough of Kingston Economic Vulnerability Map

Legend  Areas of Extreme Vulnerability

**Economic Vulnerability**

-  Lowest
-  Moderate
-  Highest

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Loddell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

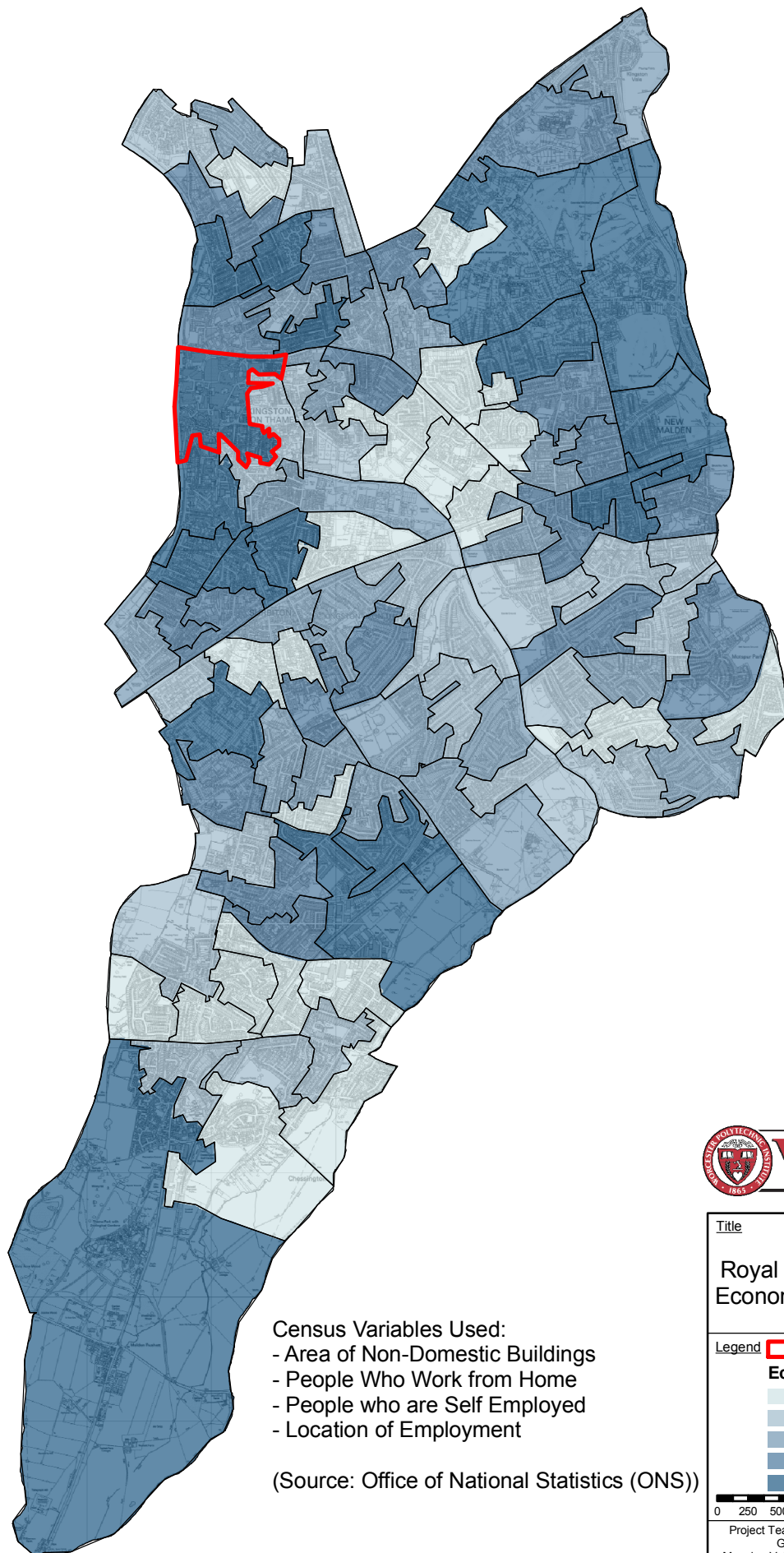
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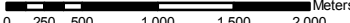



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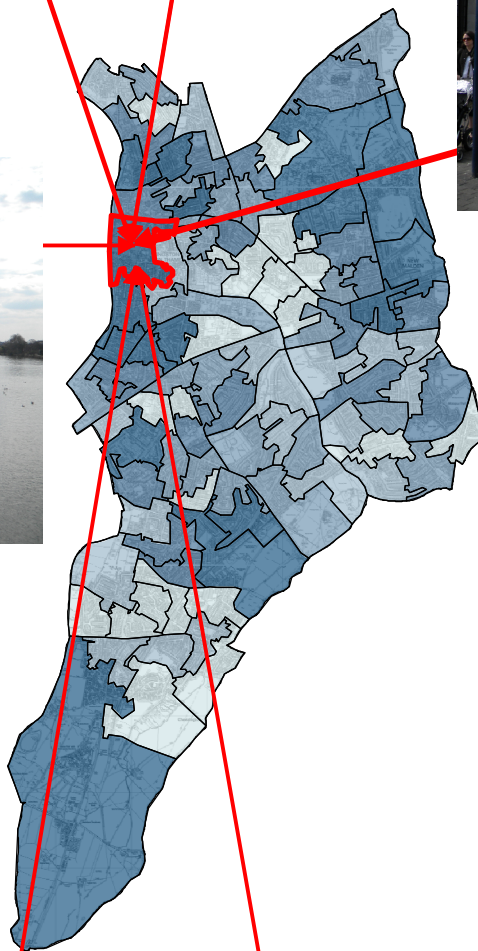
- Area of Non-Domestic Buildings
- People Who Work from Home
- People who are Self Employed
- Location of Employment

(Source: Office of National Statistics (ONS))



Title	
Royal Borough of Kingston Economic Vulnerability Map	
Legend	 Areas of Extreme Vulnerability
<b>Economic Vulnerability</b>	
	Lowest
	Moderate
	Highest
	
Project Team: James D'Entremont, Jacob Grzyb, Gregory Loddell, & Brijen Patel Mapping Vulnerability to Climate Change in the RBK Worcester Polytechnic Institute / IQP	
Operator: KPT	 1:50,000
Date: 29 April 2010	
Dwn: eco_vul_2	





Title

## Royal Borough of Kingston Economic Vulnerability Map

**Legend**   Areas of Extreme Vulnerability

**Economic Vulnerability**

- Lowest
- Moderate
- Highest

0 500 1,000 2,000 3,000 4,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

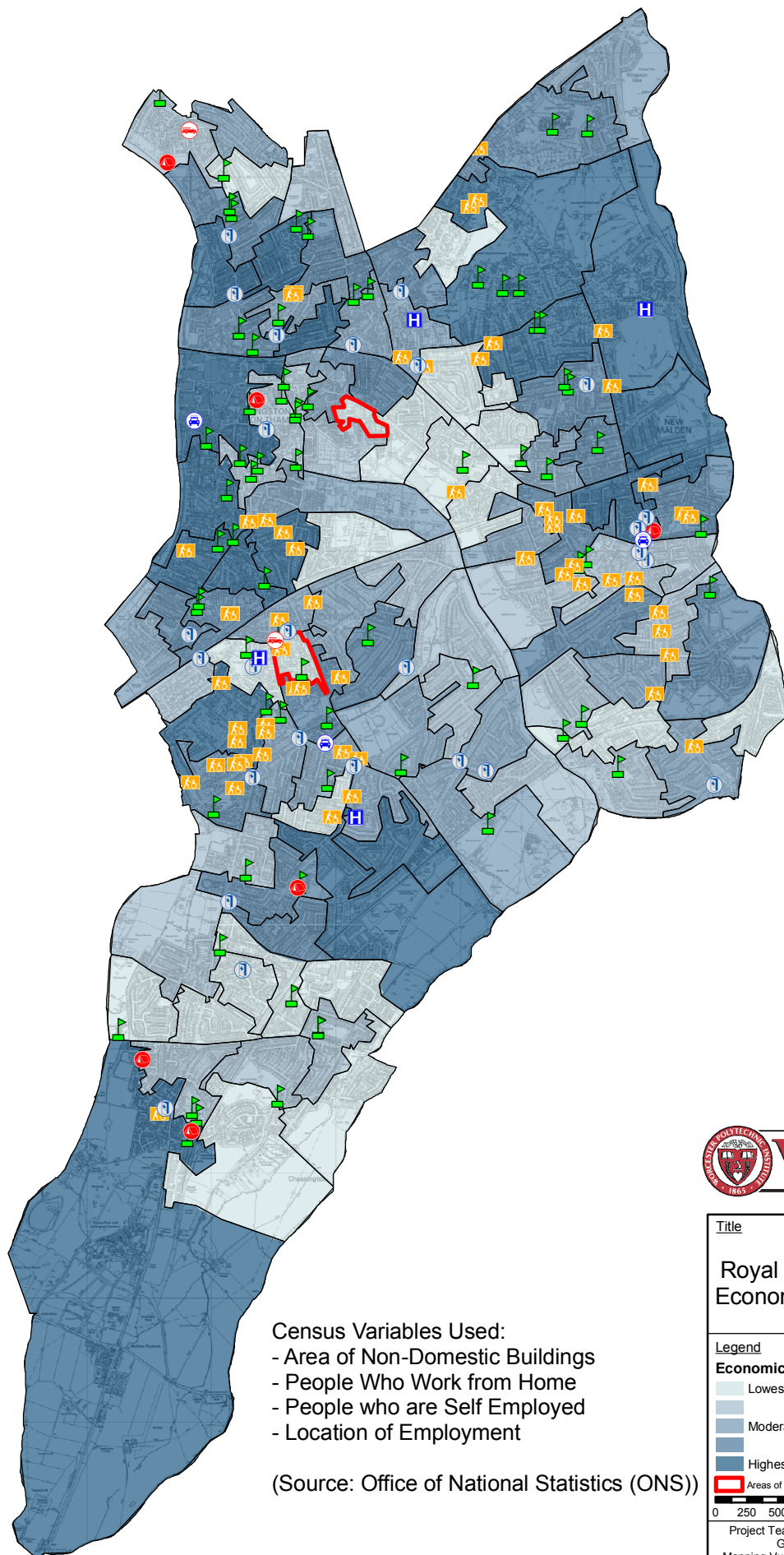
Operator: KPT

Date: 29 April 2010

Dwn: eco\_vul\_3

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1:100,000





Census Variables Used:

- Area of Non-Domestic Buildings
- People Who Work from Home
- People who are Self Employed
- Location of Employment

(Source: Office of National Statistics (ONS))



Title

## Royal Borough of Kingston Economic Vulnerability Map

Legend	
<b>Economic Vulnerability</b>	Fire Stations
Lowest	Police Stations
Moderate	Hospitals
Highest	Medical Centres
Areas of Extreme Vulnerability	Rest Centres
	Community Care
	Education Facilities

0 250 500 1,000 1,500 2,000 Meters

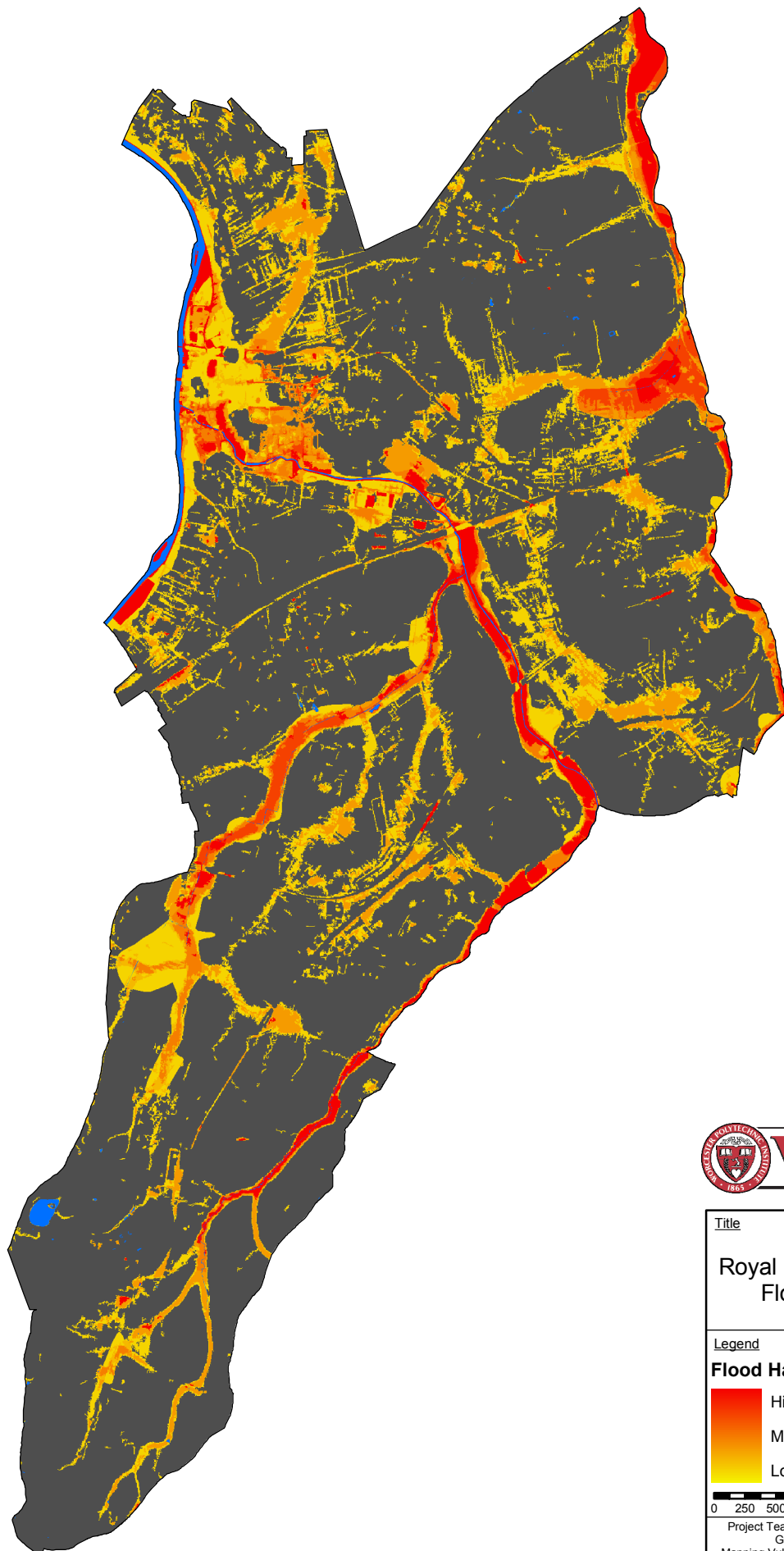
Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT  
Date: 29 April 2010  
Dwn: eco\_vul\_4



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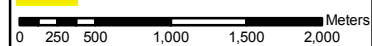
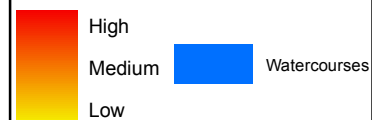


Title

## Royal Borough of Kingston Flood Hazard Map

Legend

### Flood Hazard



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Loddell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

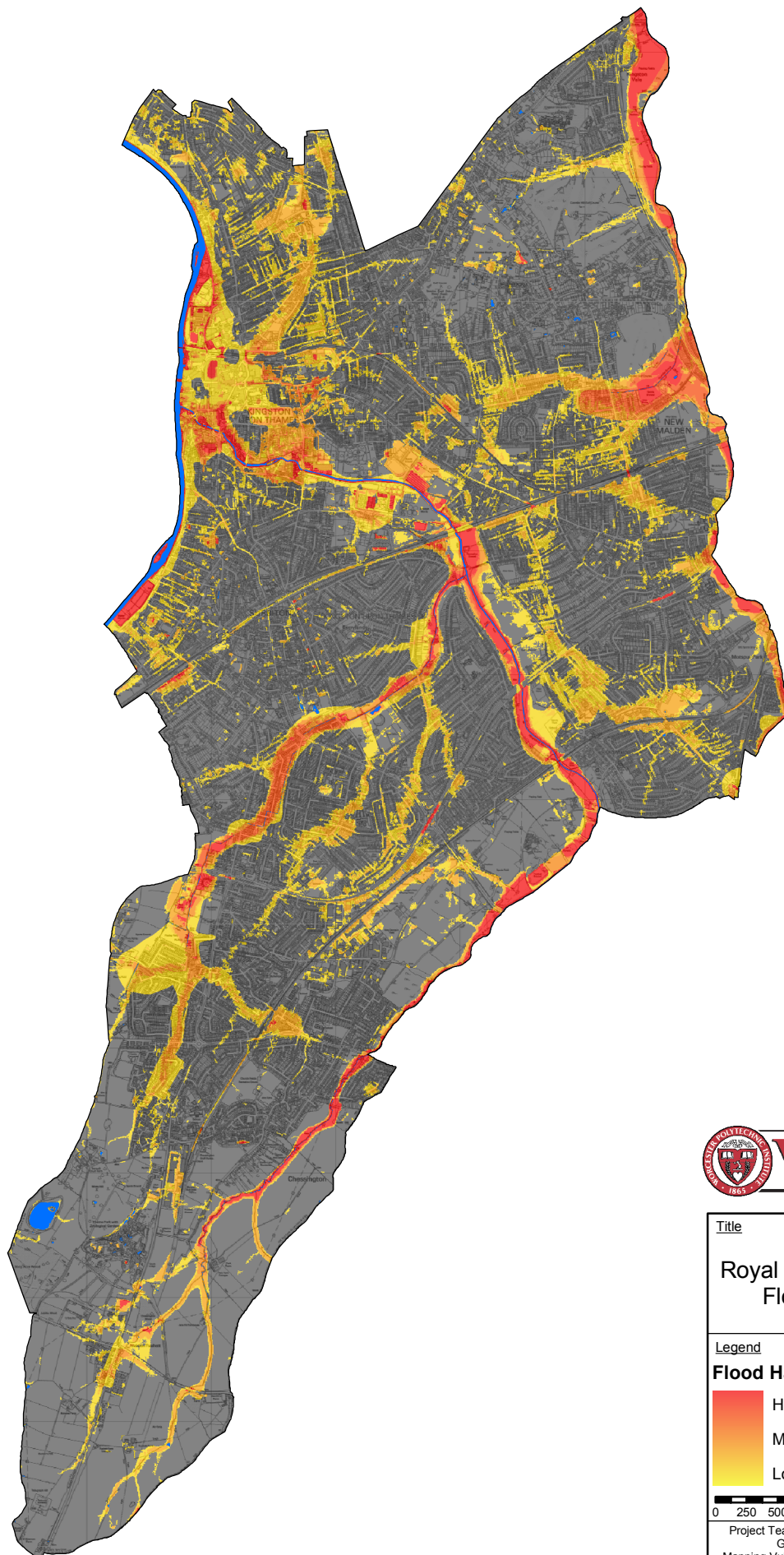
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Date: 29 April 2010

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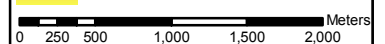


#### Title

Royal Borough of Kingston  
Flood Hazard Map

#### Legend

##### Flood Hazard



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

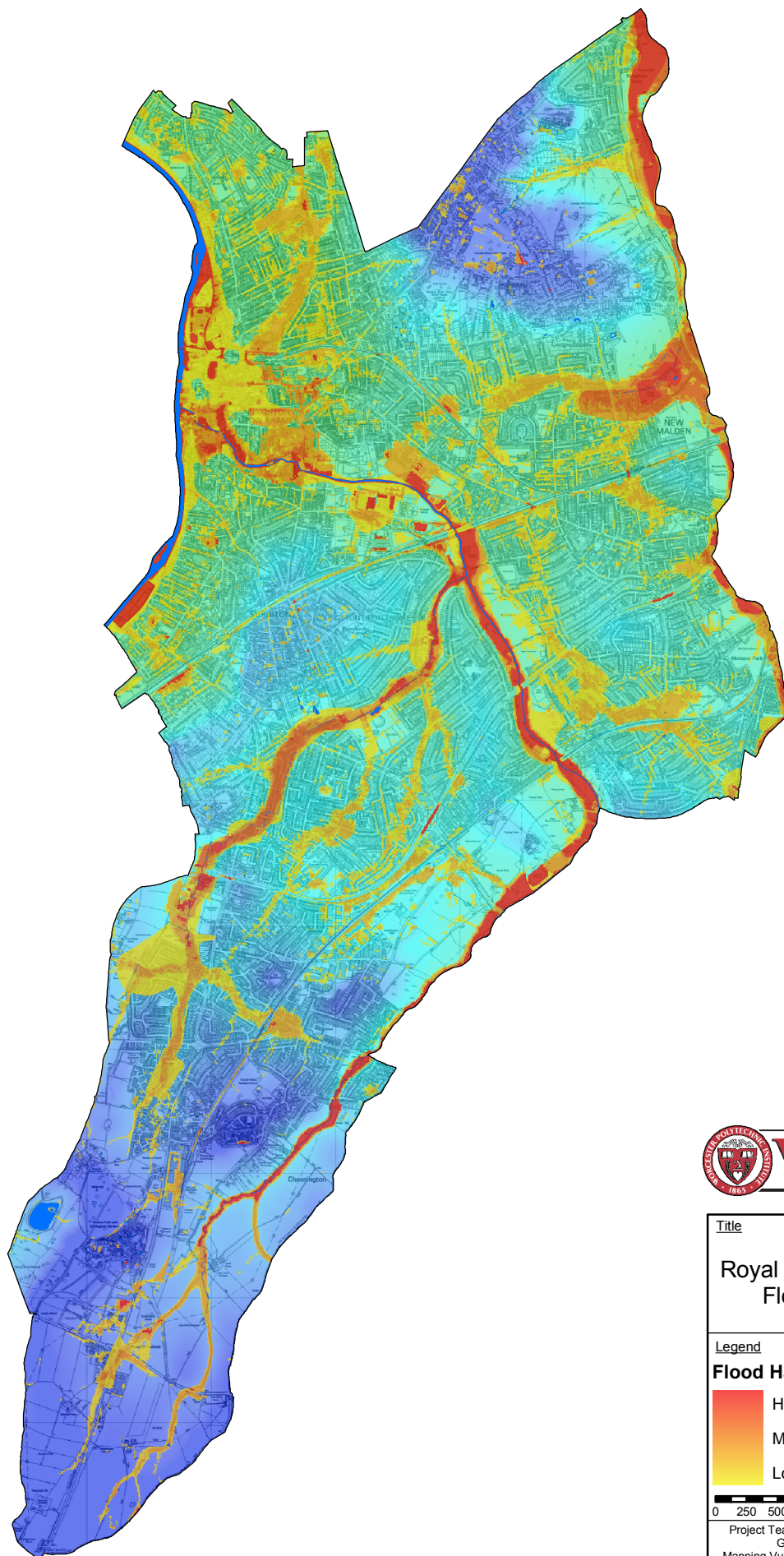
Date: 29 April 2010

Dwn: flood\_haz\_2



1:50,000





Title

## Royal Borough of Kingston Flood Hazard Map

Legend

### Flood Hazard

High  
Medium  
Low

Watercourses

### Elevation (m)

High : 91.47  
Low : -1.75

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

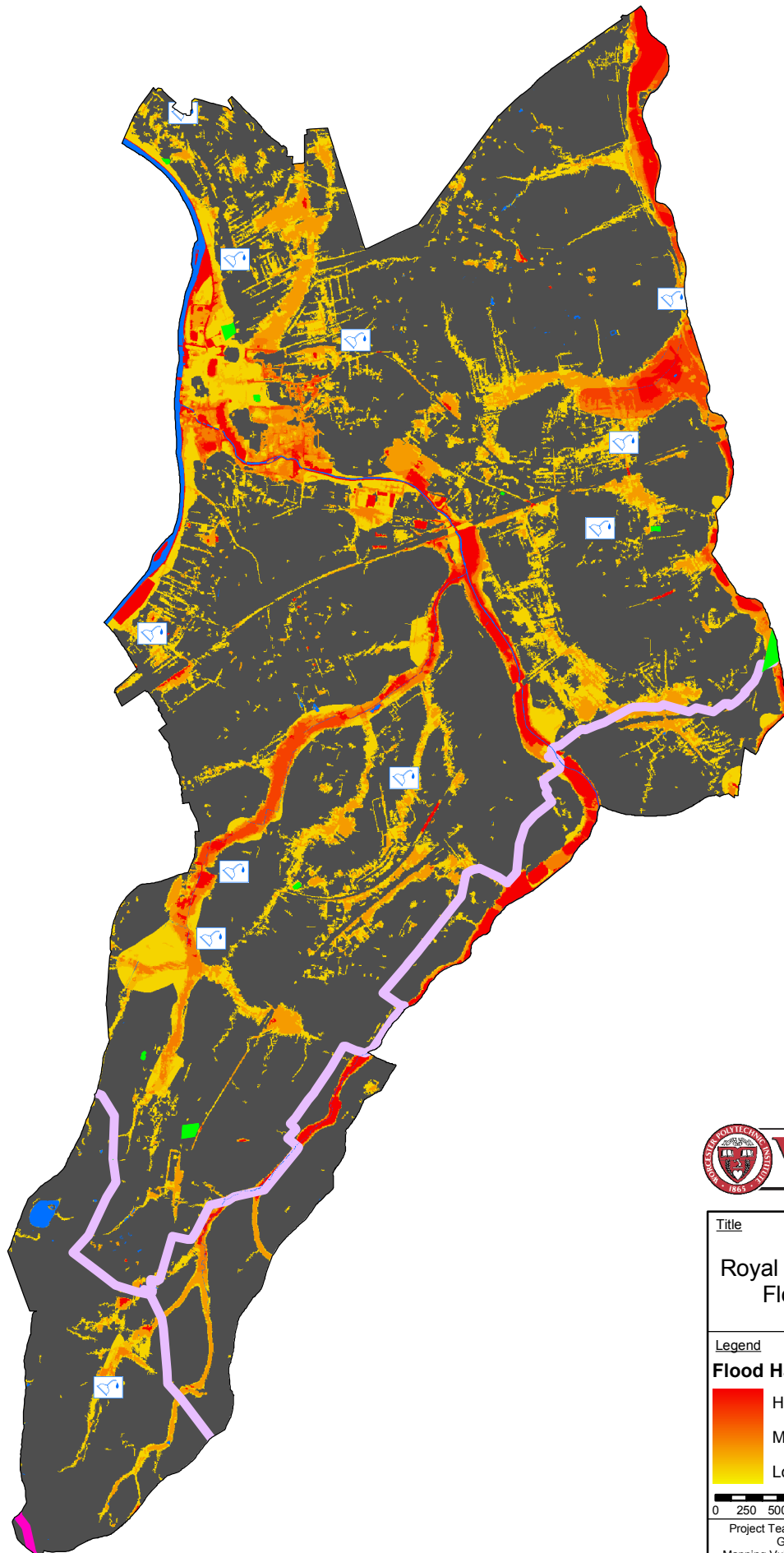
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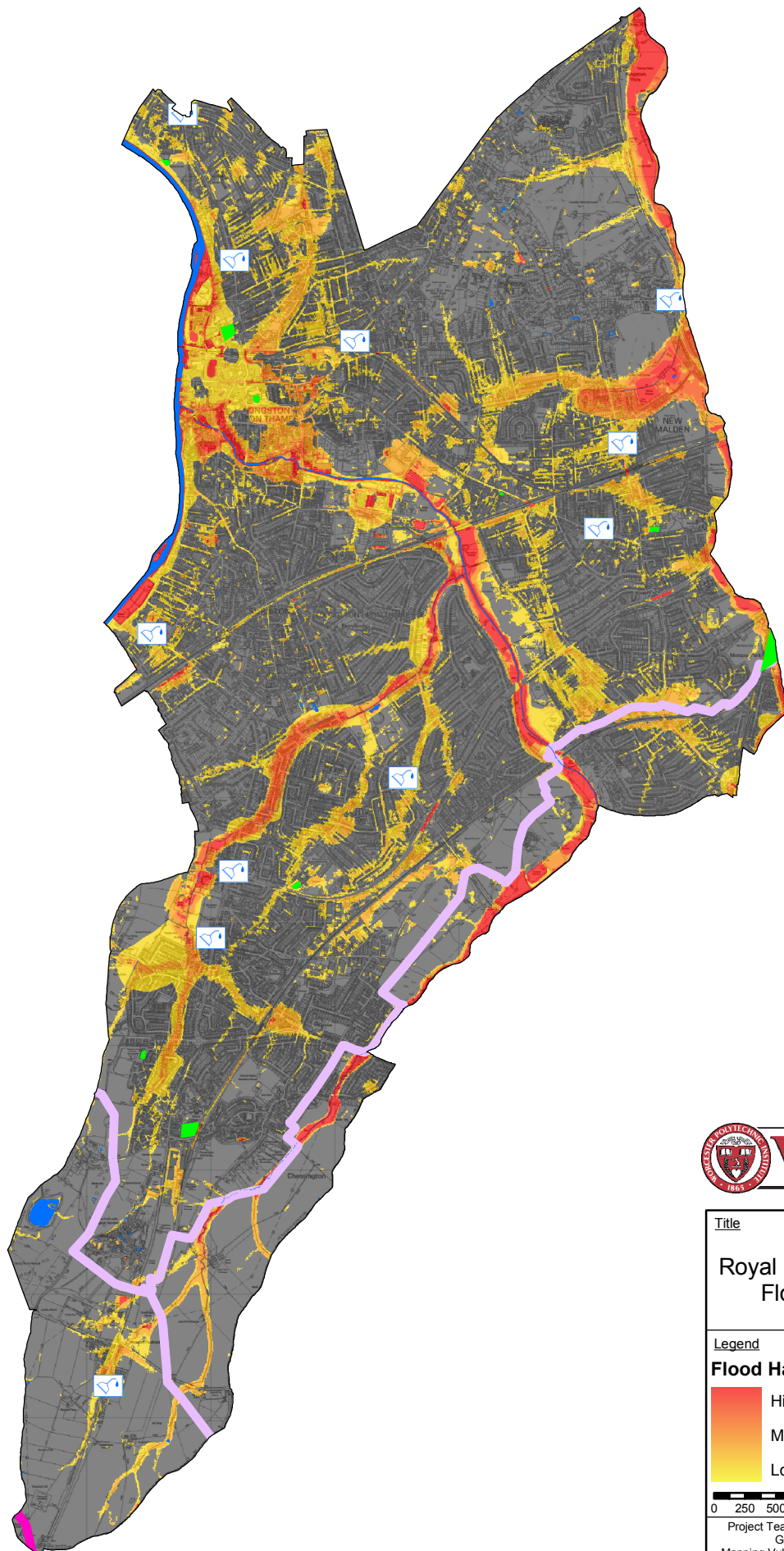


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Title	
Royal Borough of Kingston Flood Hazard Map	
Legend	
<b>Flood Hazard</b>	Petrol Stations
High	Gas Holders
Medium	Gas Pipeline
Low	Oil Pipeline
	Watercourses
Project Team: James D'Entremont, Jacob Grzyb, Gregory Loddell, & Brijen Patel Mapping Vulnerability to Climate Change in the RBK Worcester Polytechnic Institute / IQP	
Operator: KPT	
Date: 29 April 2010	
Dwn: flood_haz_4	
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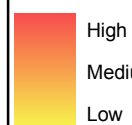


Title

## Royal Borough of Kingston Flood Hazard Map

Legend

### Flood Hazard



Petrol Stations



Gas Holders



Gas Pipeline



Oil Pipeline



Watercourses

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

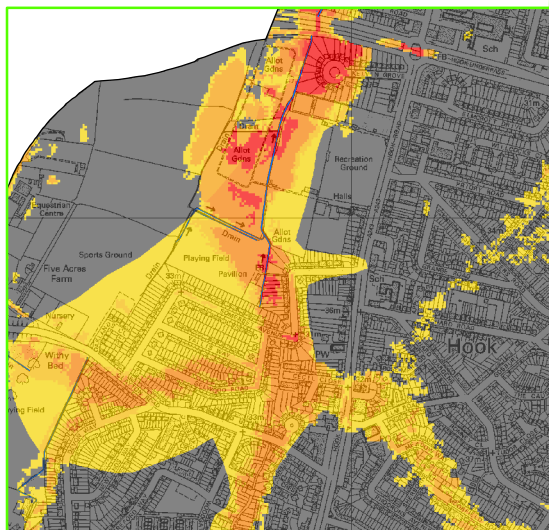
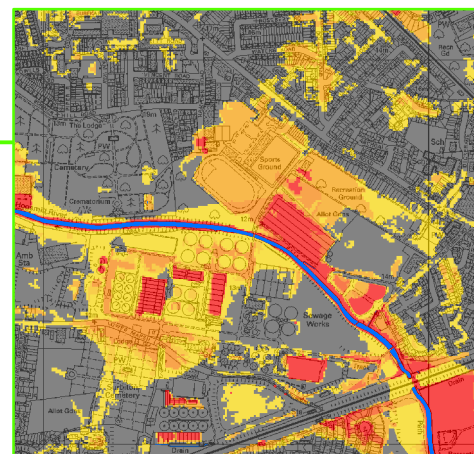
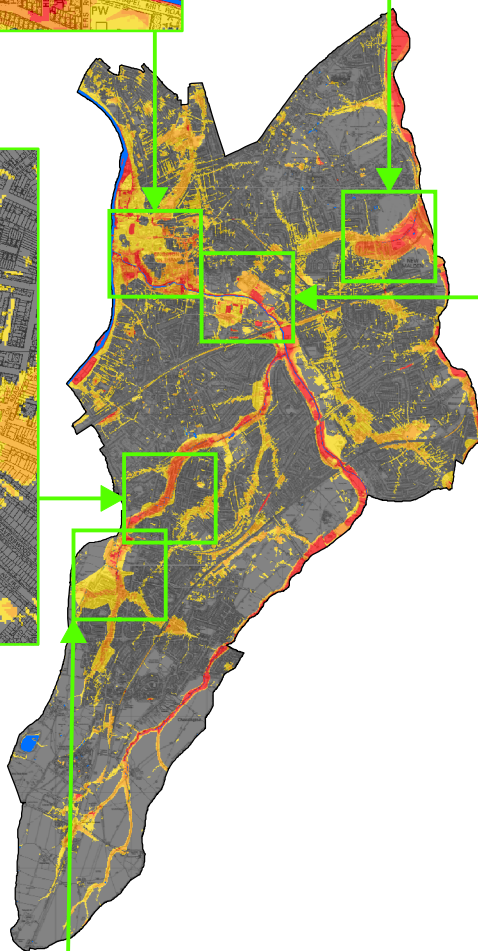
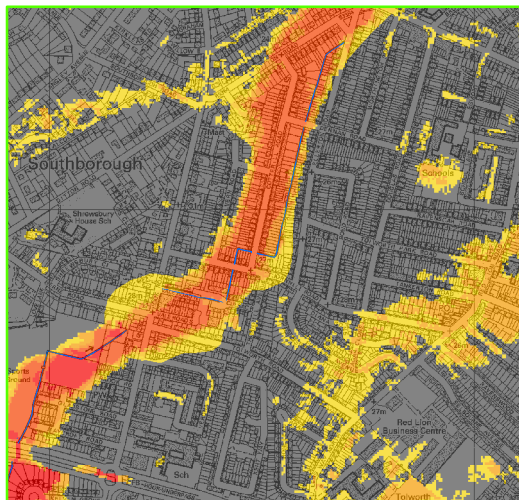
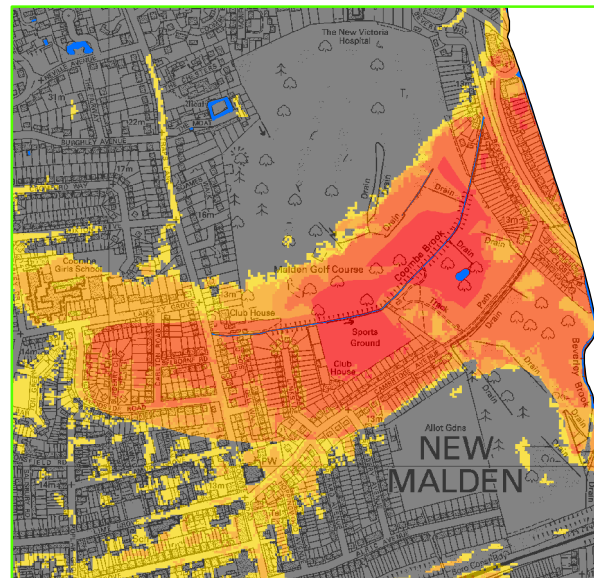
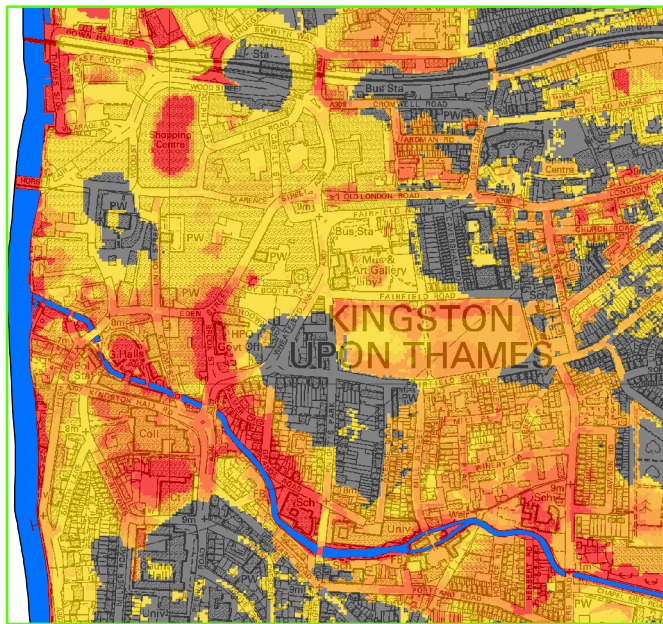
Date: 29 April 2010

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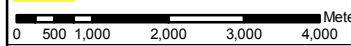
**Title**

# Royal Borough of Kingston Flood Hazard Map

**Legend**

**Flood Hazard**

- High
- Medium
- Low
- Watercourses



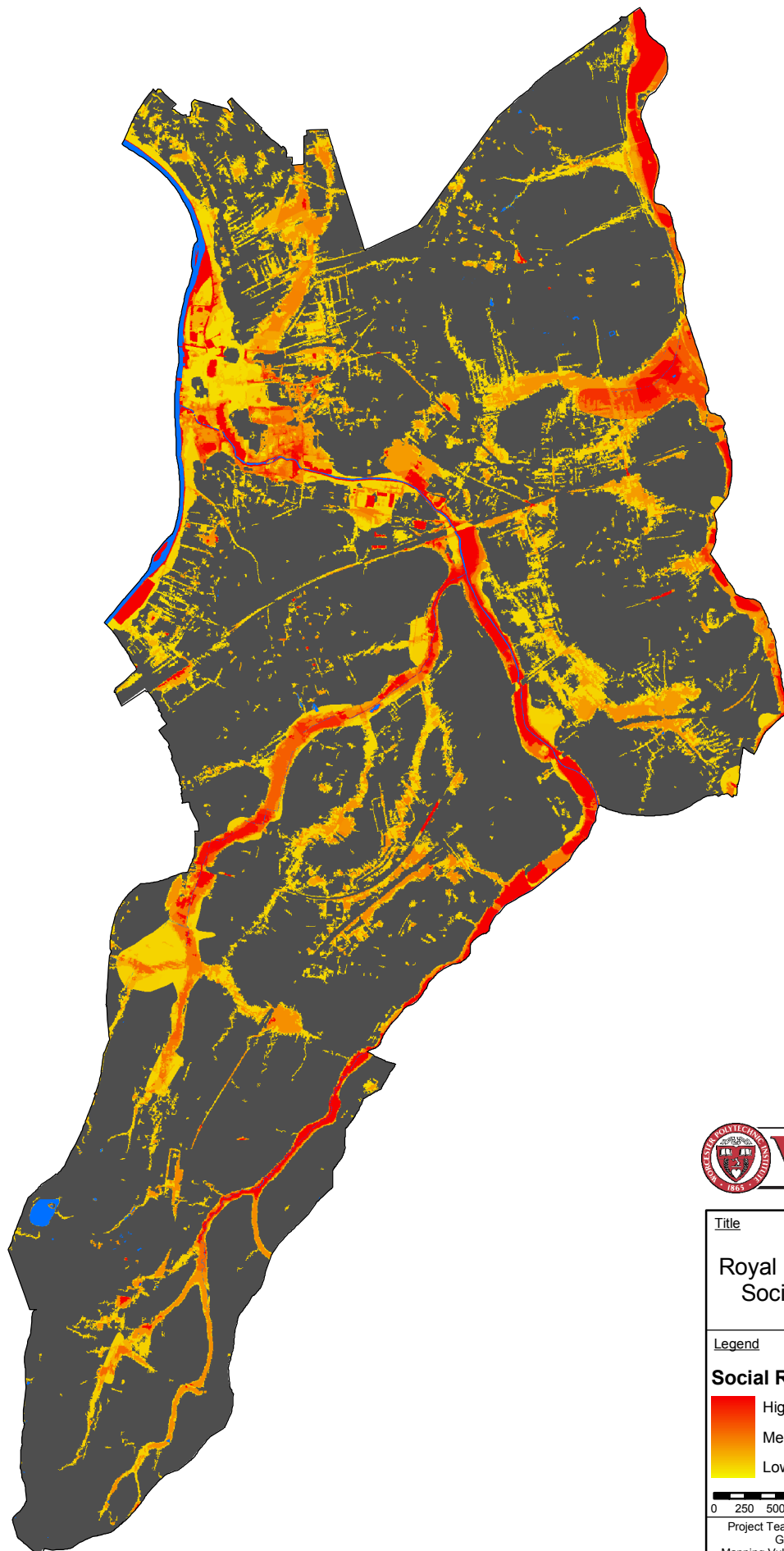
Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT  
Date: 29 April 2010  
Dwn: flood\_haz\_6



1:100,000





#### Title

Royal Borough of Kingston  
Social Flood Risk Map

#### Legend

##### Social Risk

■ High  
■ Medium  
■ Low

■ Watercourses

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
 Gregory Loddell, & Brijen Patel  
 Mapping Vulnerability to Climate Change in the RBK  
 Worcester Polytechnic Institute / IQP

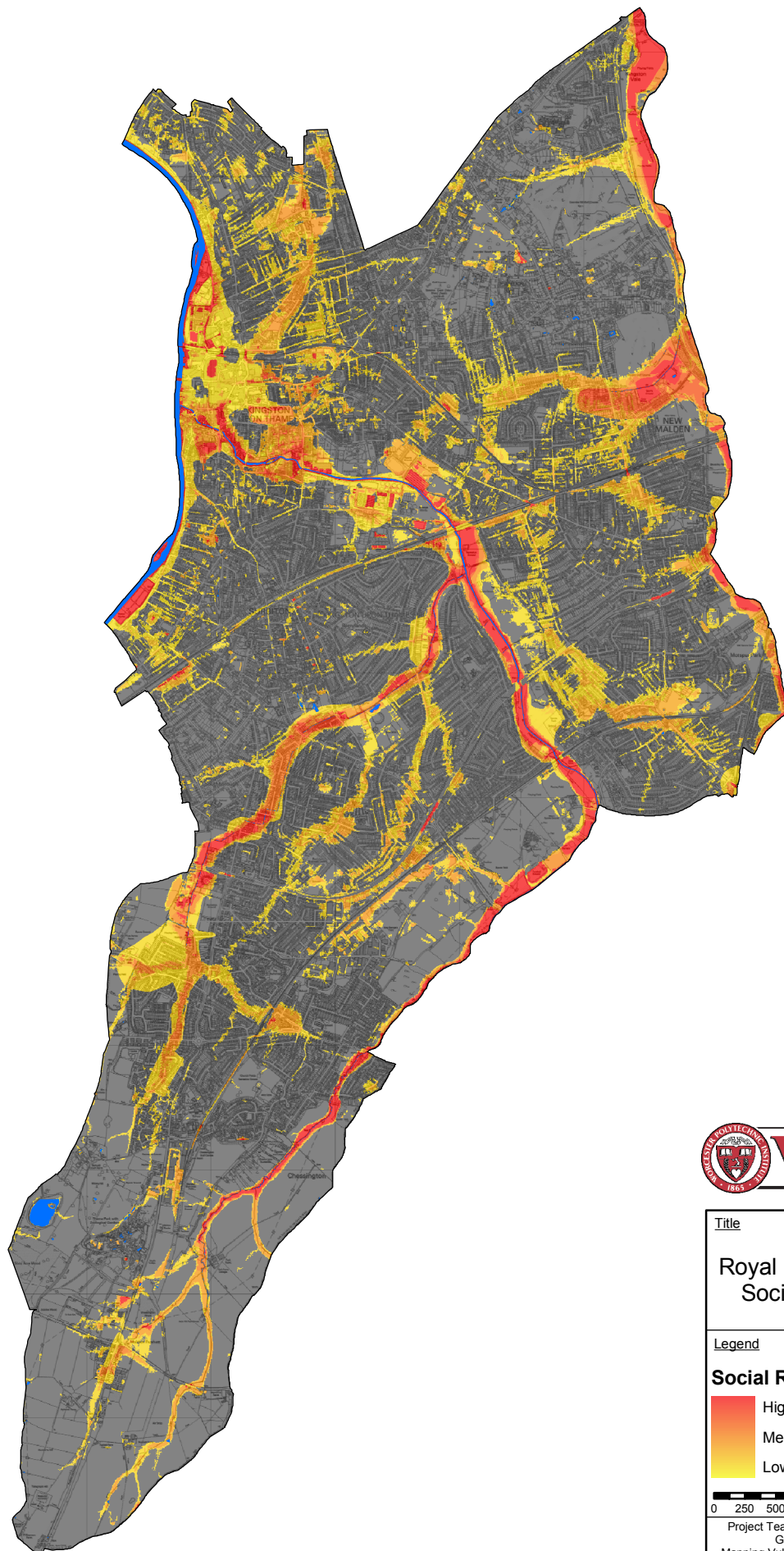
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Date: 29 April 2010

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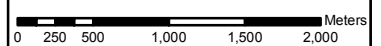


Title

## Royal Borough of Kingston Social Flood Risk Map

Legend

### Social Risk



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobbell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
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Operator: KPT

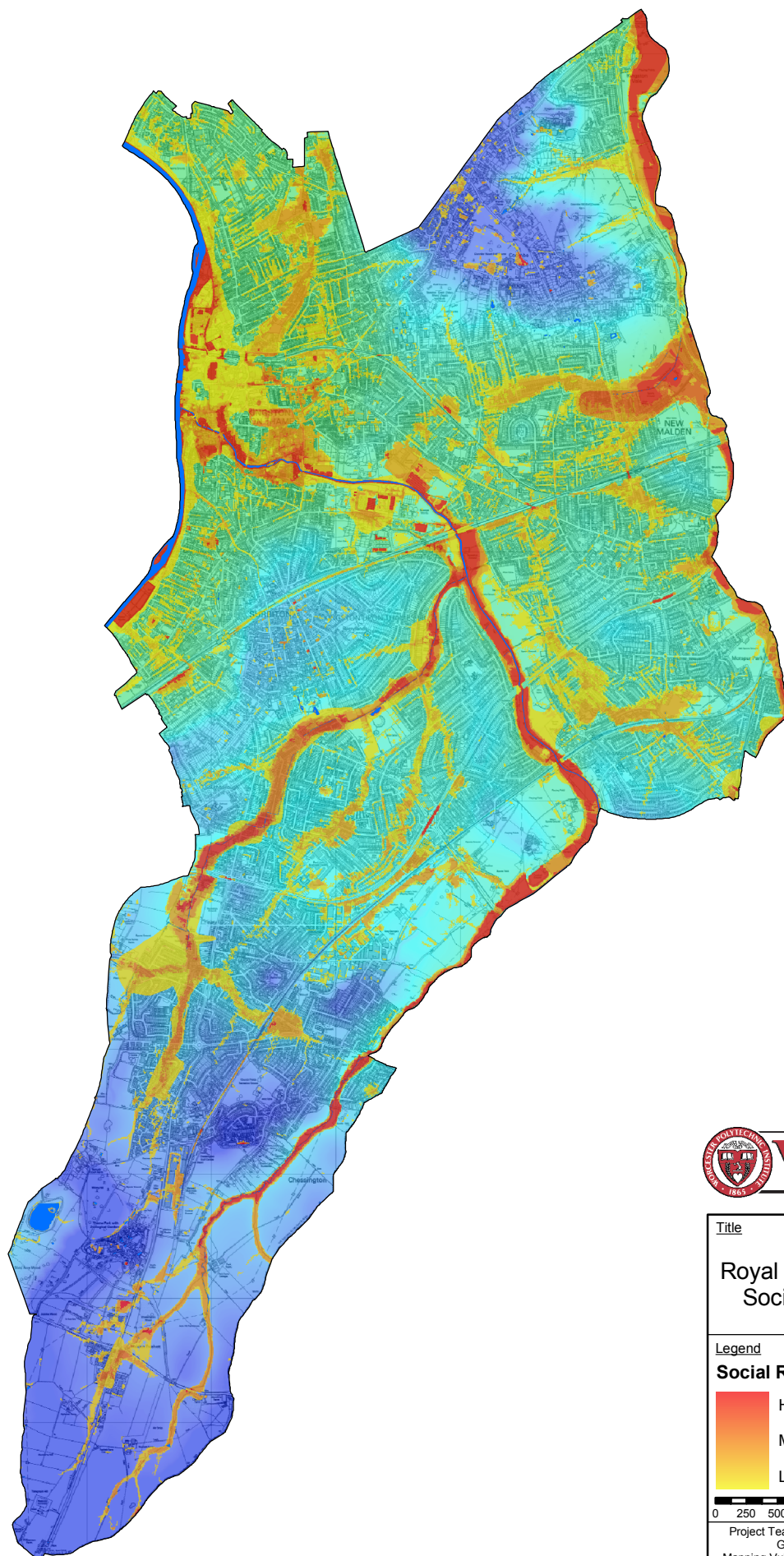
Date: 29 April 2010

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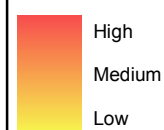


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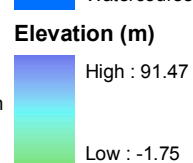
## Royal Borough of Kingston Social Flood Risk Map

Legend

**Social Risk**



**Elevation (m)**



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
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Operator: KPT

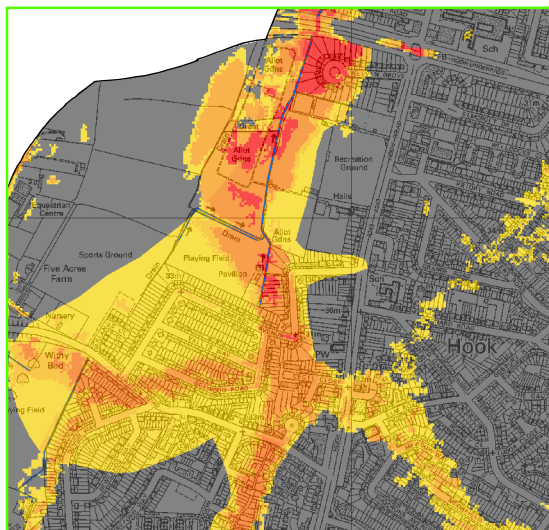
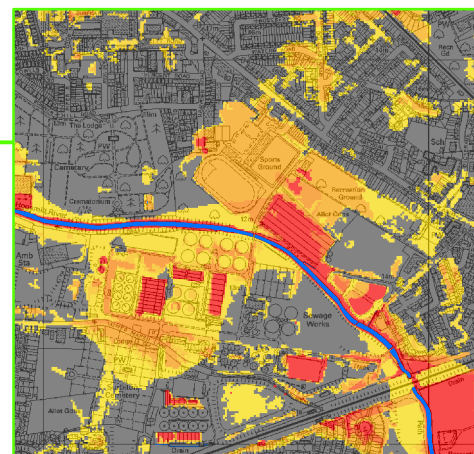
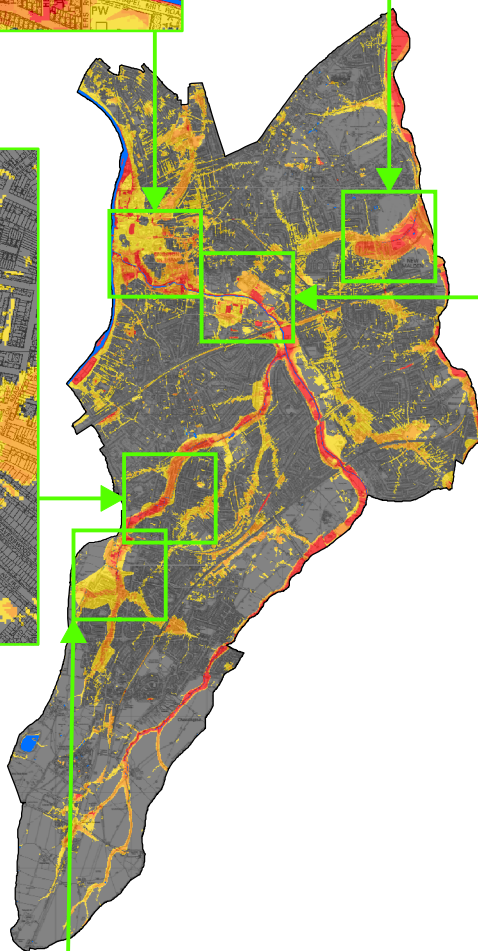
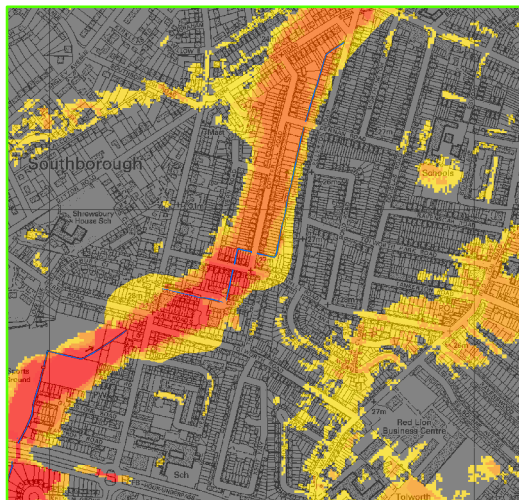
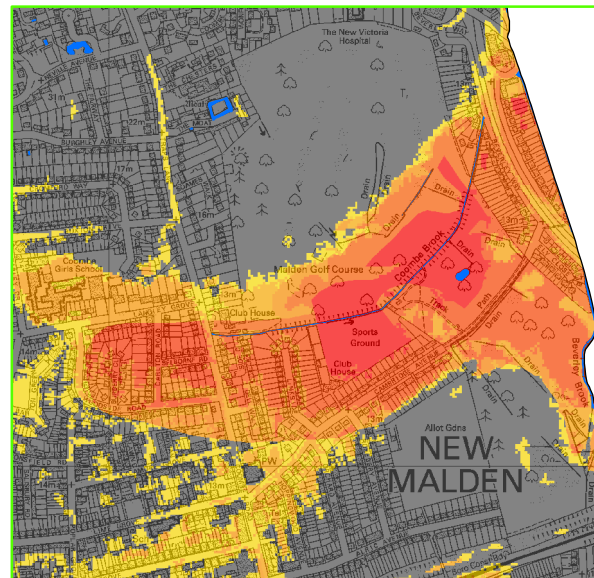
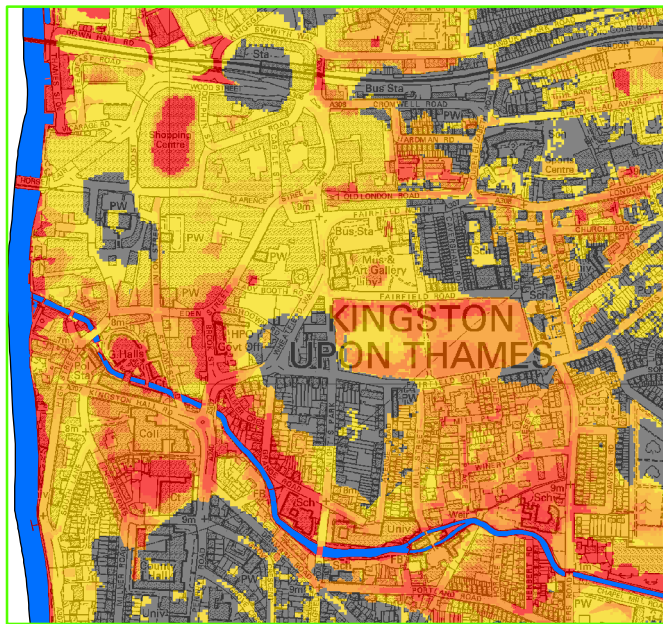
Date: 29 April 2010

Dwn: soc\_risk\_3



1:50,000





# Title Royal Borough of Kingston Social Flood Risk Map

**Legend**

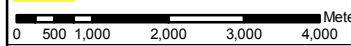
**Social Risk**

High (Red)

Medium (Yellow)

Low (Light Yellow)

Watercourses (Blue)



Project Team: James D'Entremont, Jacob Grzyb, Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

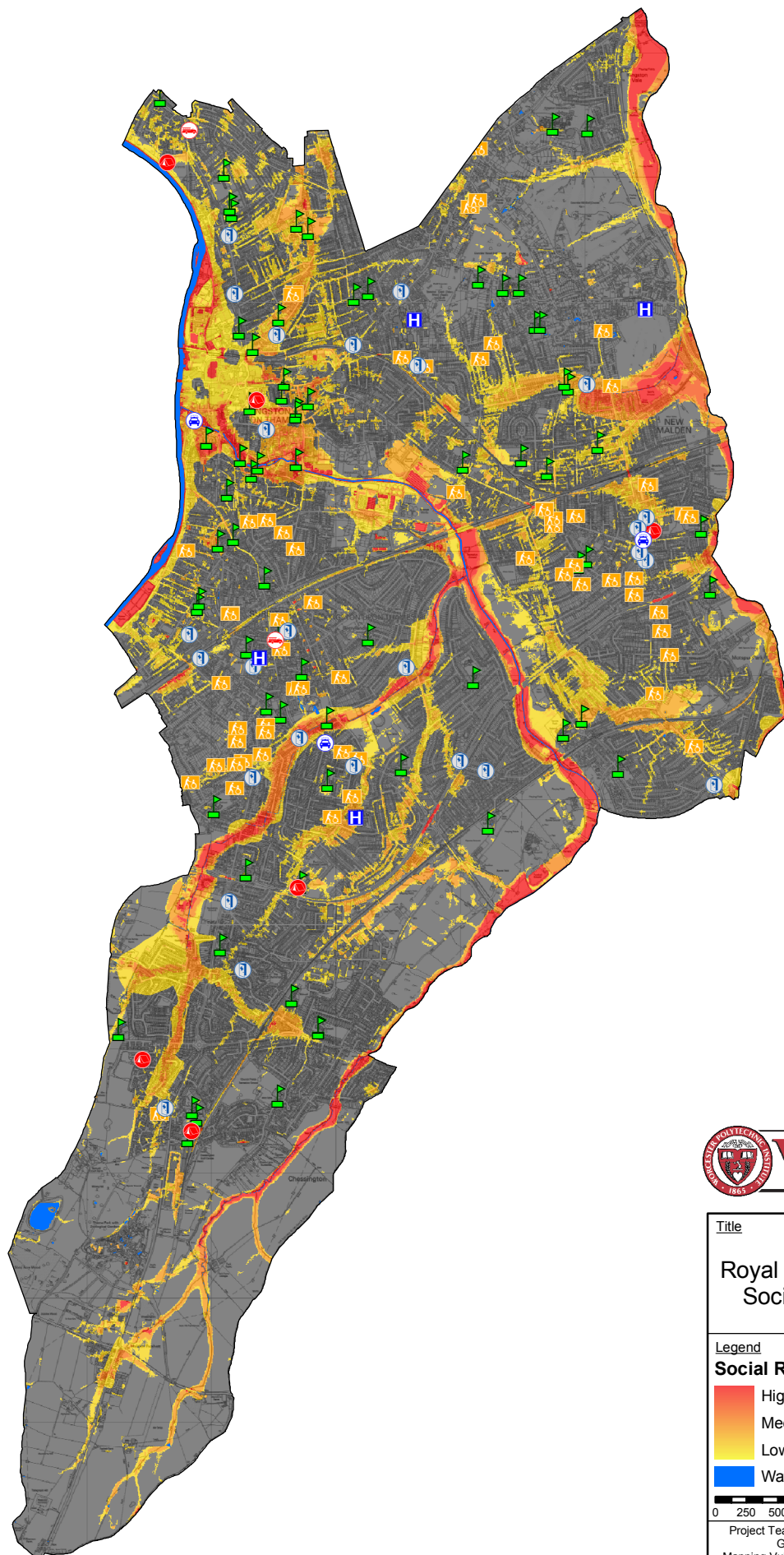
Operator: KPT

Date: 29 April 2010

Dwn: soc\_risk\_4

1:100,000





Title

## Royal Borough of Kingston Social Flood Risk Map

### Legend

#### Social Risk

- High
- Medium
- Low

#### Watercourses

- Fire Stations
- Police Stations
- Hospitals
- Medical Centres
- Rest Centres
- Community Care
- Education Facilities

0 250 500 1,000 1,500 2,000 Meters

Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

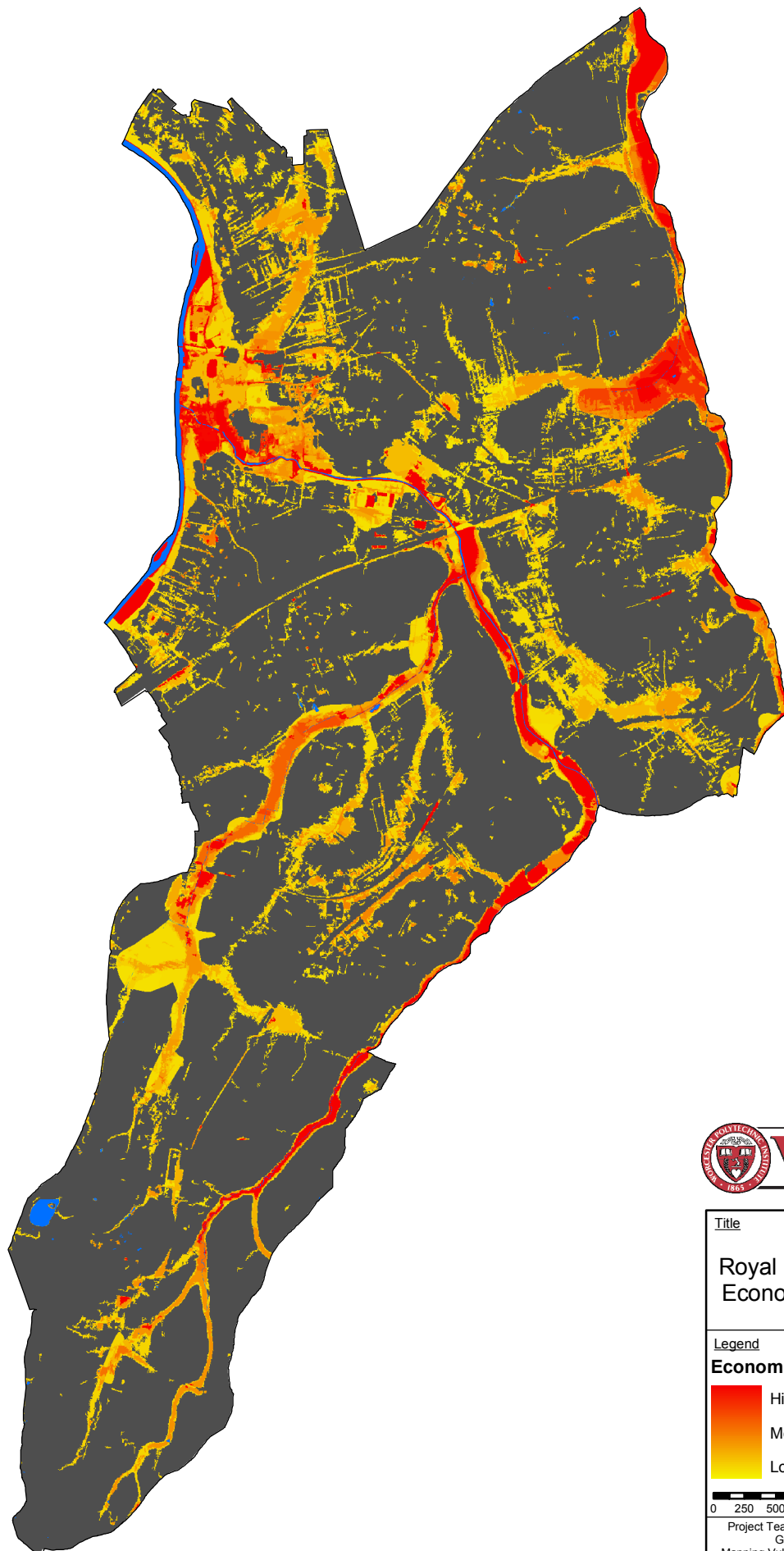
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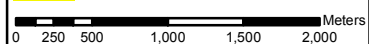
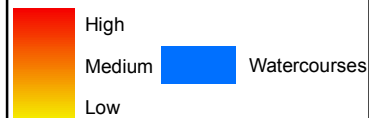


#### Title

Royal Borough of Kingston  
Economic Flood Risk Map

#### Legend

##### Economic Risk



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
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Worcester Polytechnic Institute / IQP

Operator: KPT

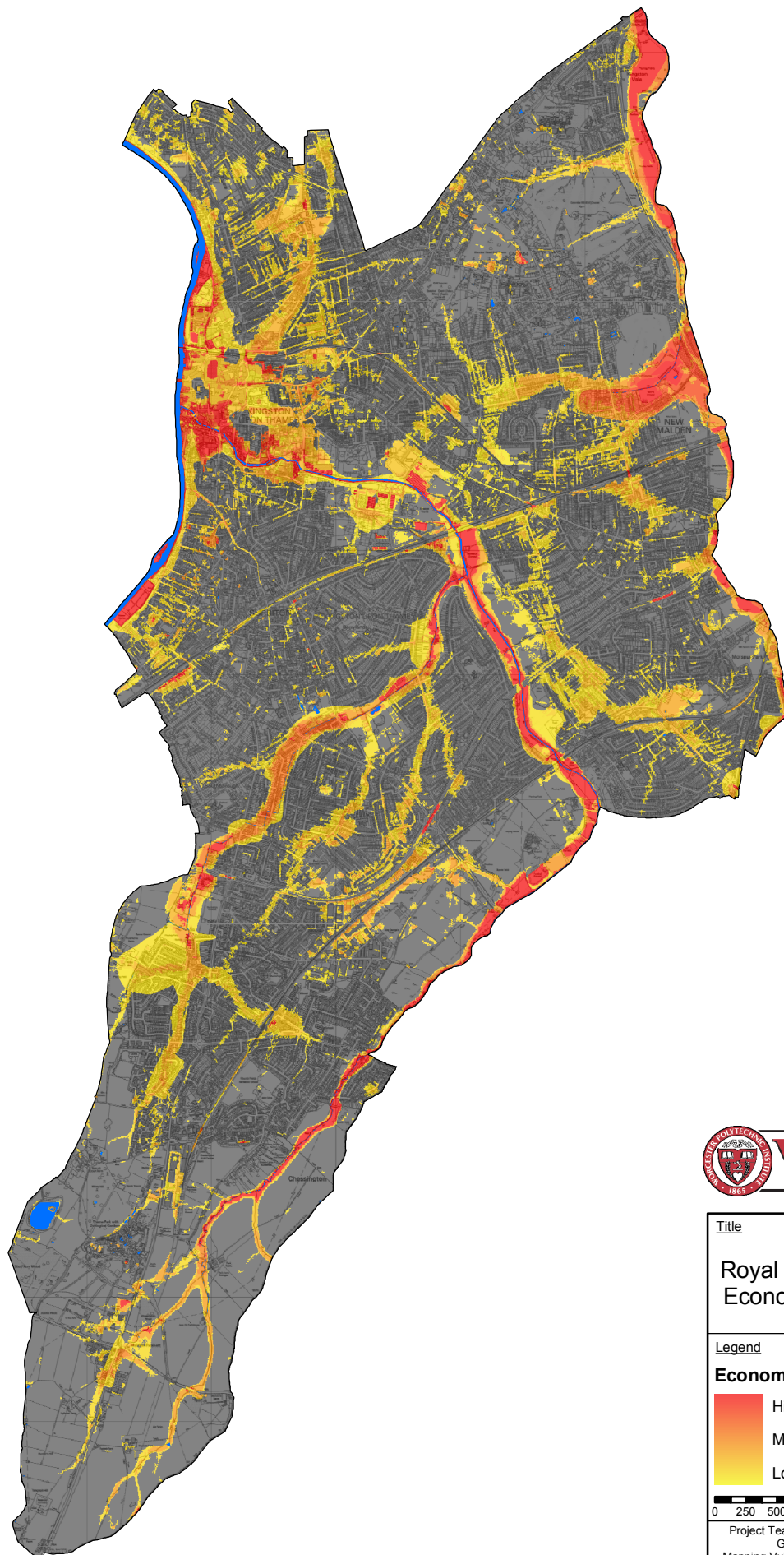
Date: 29 April 2010

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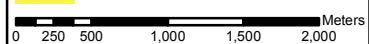


#### Title

Royal Borough of Kingston  
Economic Flood Risk Map

#### Legend

##### Economic Risk



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

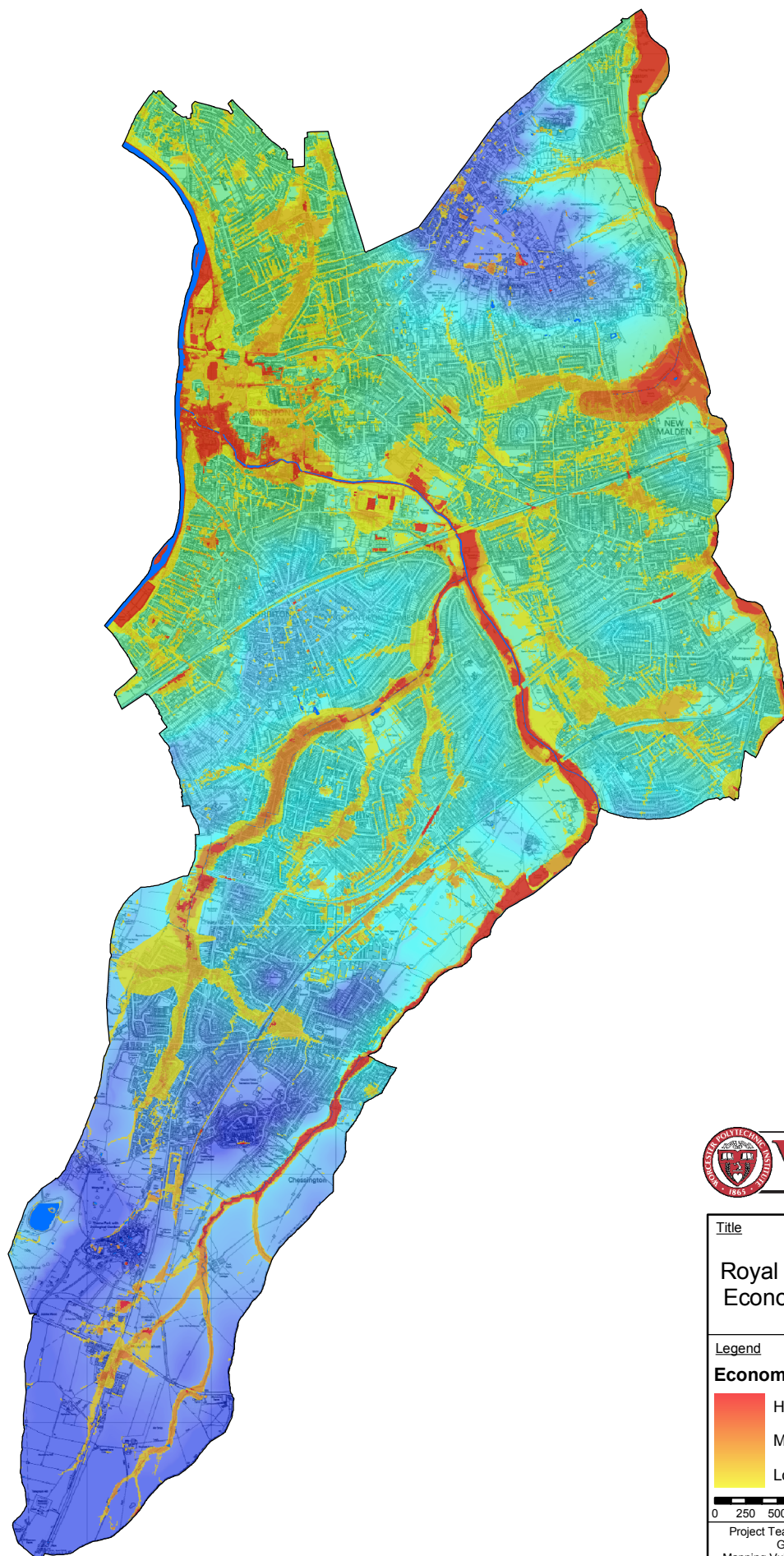
Operator: KPT

Date: 29 April 2010

Dwn: eco\_risk\_2



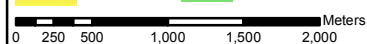
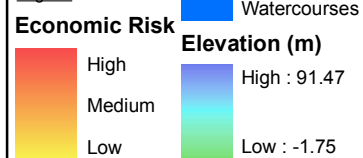
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Title

## Royal Borough of Kingston Economic Flood Risk Map

Legend



Project Team: James D'Entremont, Jacob Grzyb,  
Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

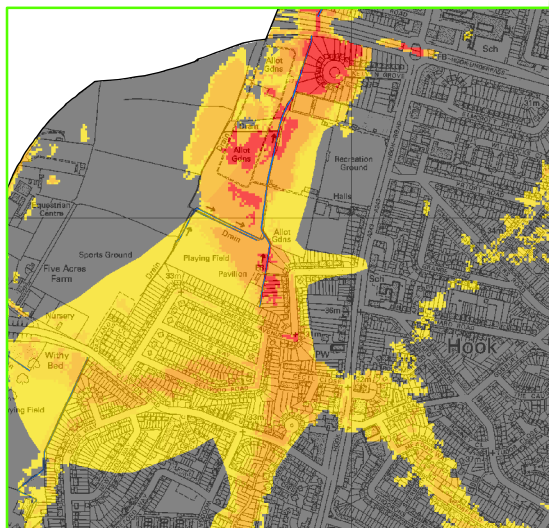
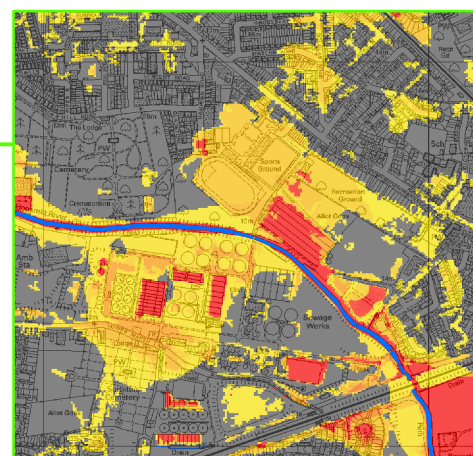
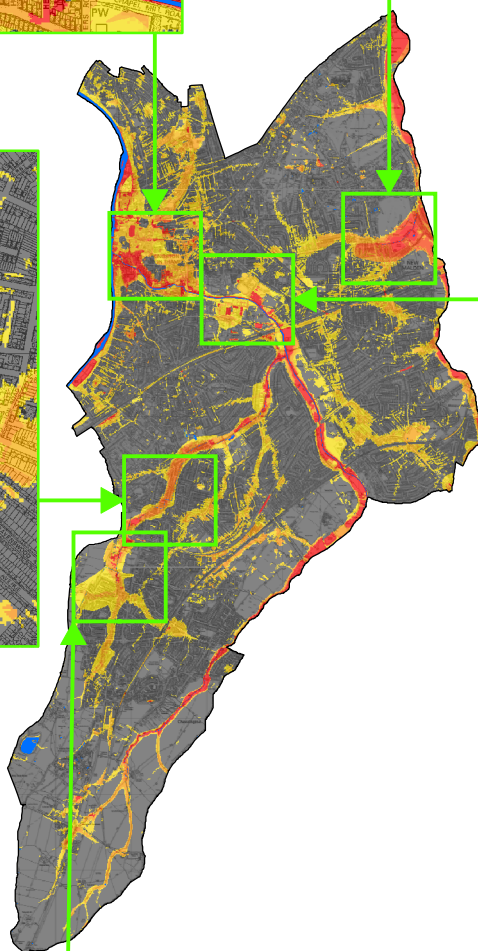
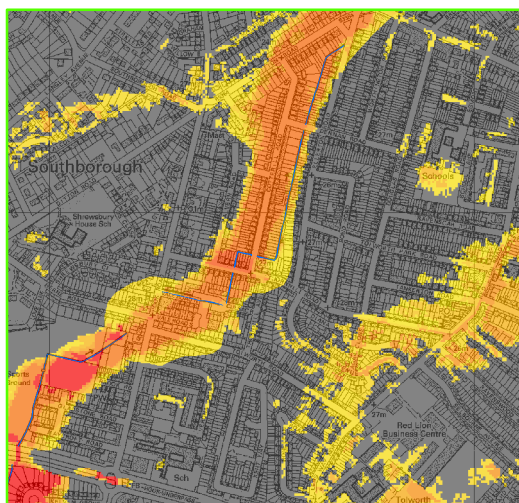
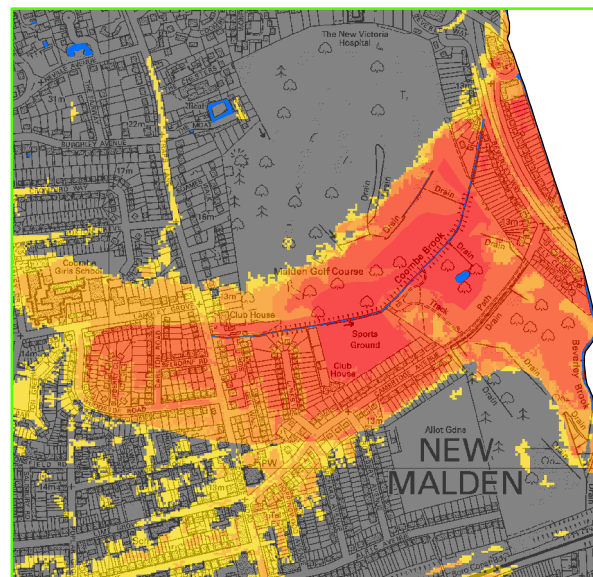
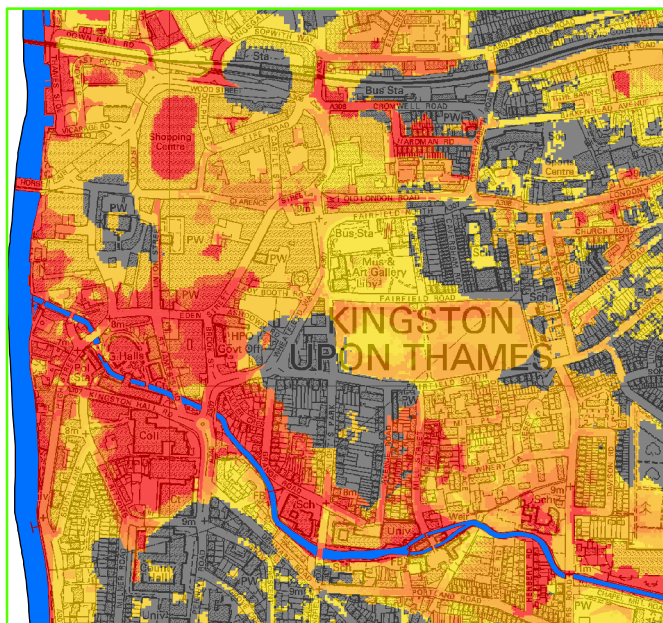
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Dwn: eco\_risk\_3



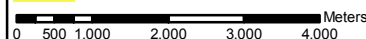
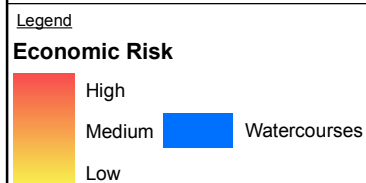
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Title

# Royal Borough of Kingston Economic Flood Risk Map



Project Team: James D'Entremont, Jacob Grzyb, Gregory Lobdell, & Brijen Patel  
Mapping Vulnerability to Climate Change in the RBK  
Worcester Polytechnic Institute / IQP

Operator: KPT

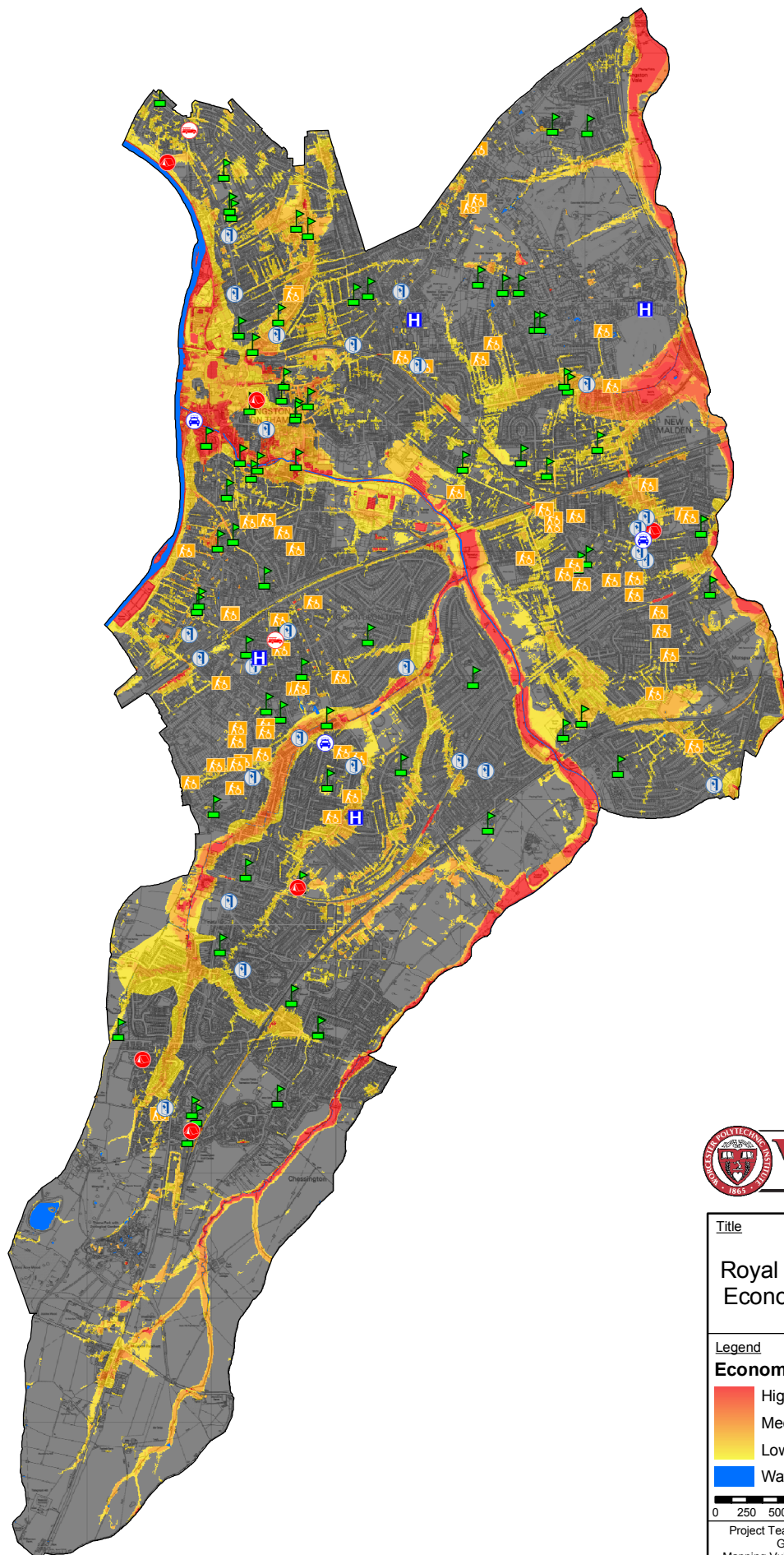
Date: 29 April 2010

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Title

## Royal Borough of Kingston Economic Flood Risk Map

### Legend

#### Economic Risk

High  
Medium  
Low

Watercourses

- Fire Stations
- Police Stations
- Hospitals
- Medical Centres
- Rest Centres
- Community Care
- Education Facilities

0 250 500 1,000 1,500 2,000 Meters

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Dwn: eco\_risk\_5



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