

JUMP! Into Your Future Career In Water

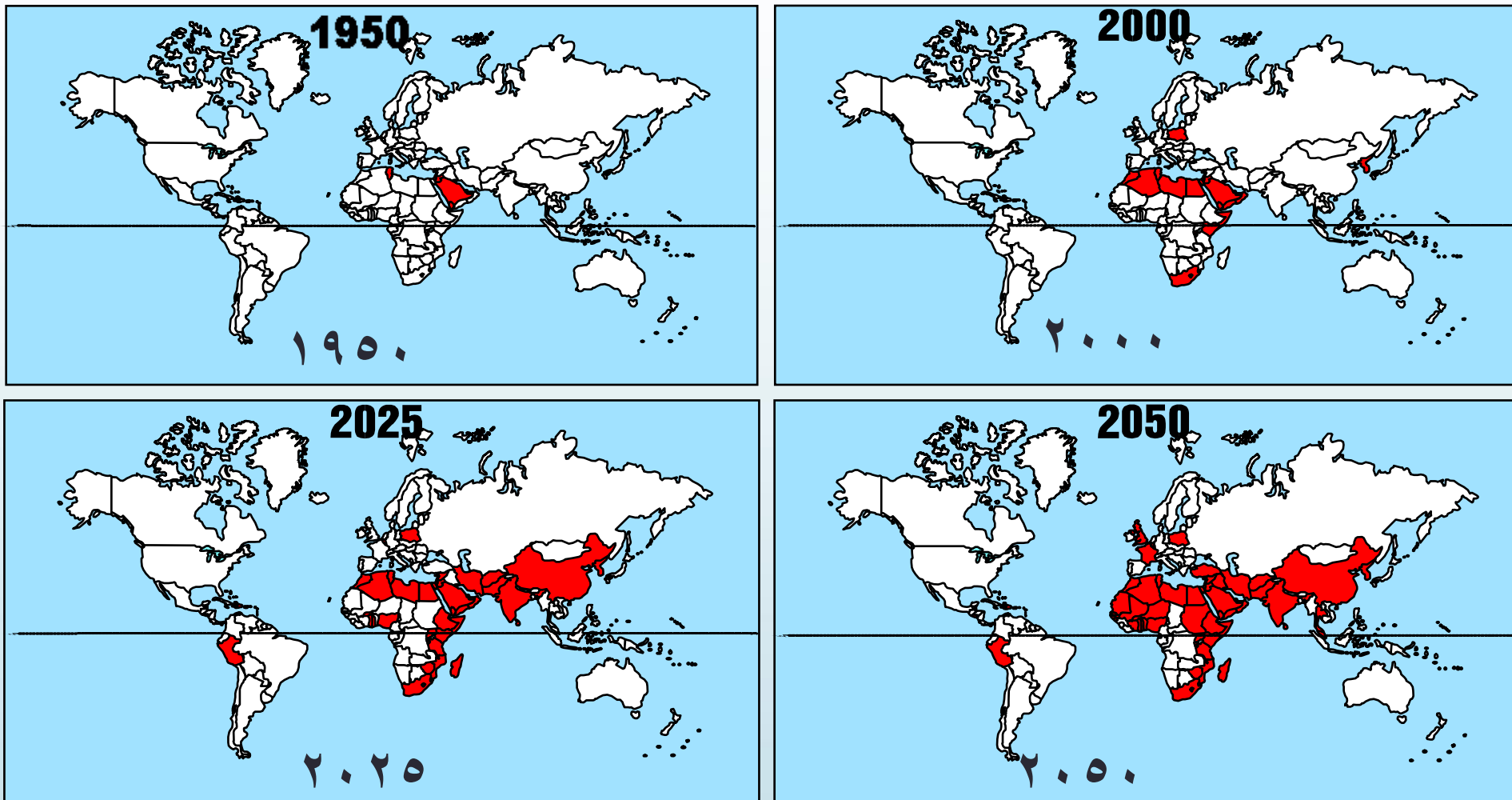


*Brought to you by Water Engineering & Environment Program
(WEE)*

Frequently Asked Questions

- 1. Why to study WEE ?**
- 2. What are the main fields of study?**
- 3. Do I need practical training to get a good job after graduation?**
- 4. Does WEE offer scholarships & How do I apply?**
- 5. What kind of jobs will I be offered after graduation?**
- 6. How much money can I expect to make as an engineer?**
- 7. Can I study and work abroad?**
- 8. In today's and future job market, is WEE a good stream to take up?**

Why to study WEE ?



Countries suffer from water shortage

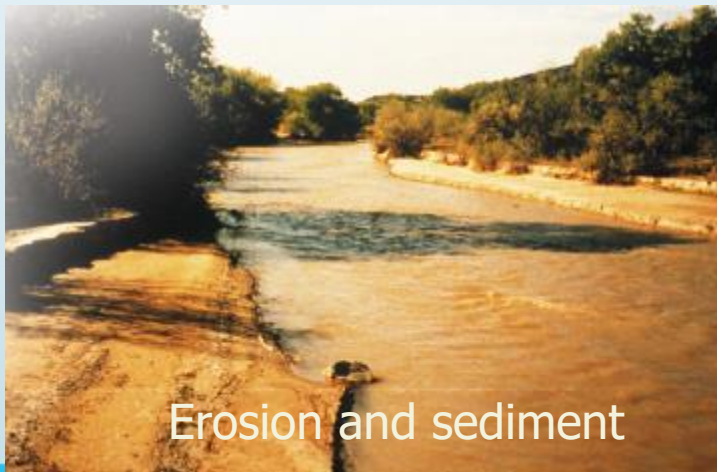
Not only Water Scarcity but also Pollutions



Sewage



Water quality can be degraded by
community and industrial waste discharge.



Erosion and sediment



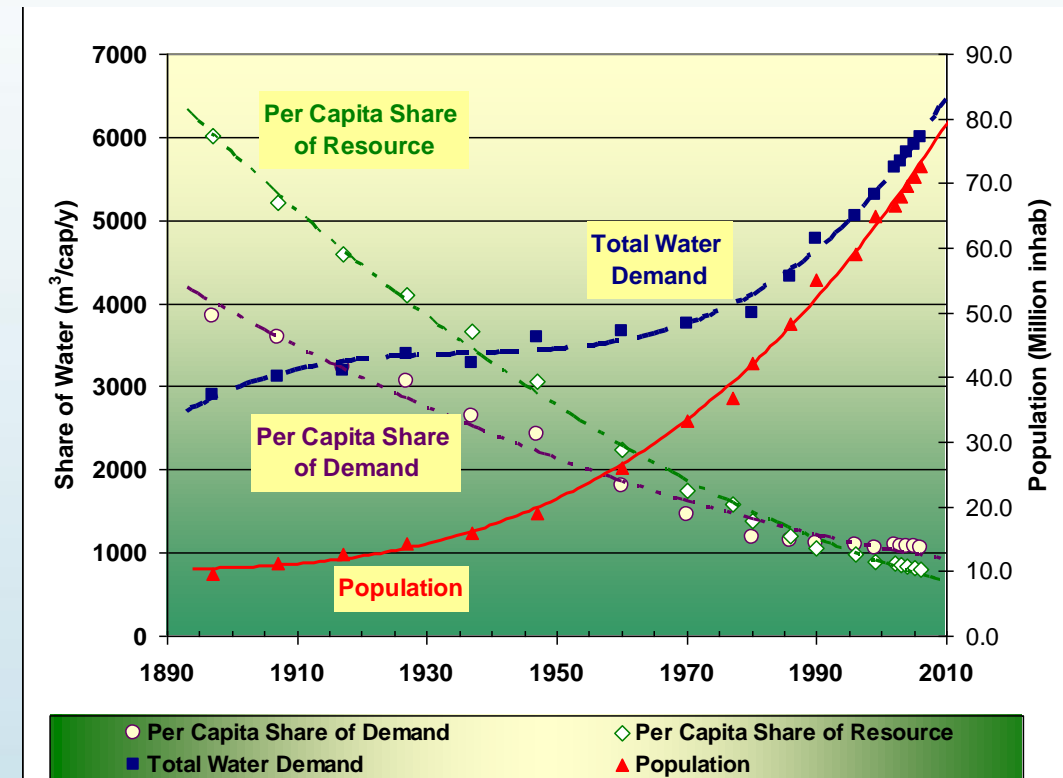
solid waste disposal

Why to study WEE ?

- To participate in solving worldwide & Egypt's top-priority challenges (**Water Scarcity** and **Environmental Problems**)

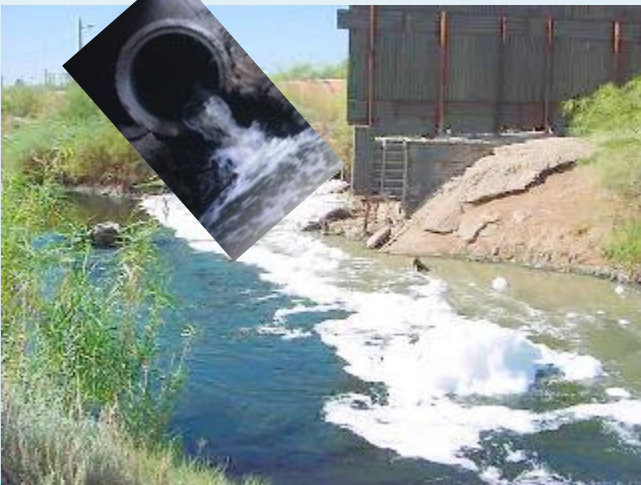


- ✓ Only 55.5 BCM/yr – NOT ENOUGH for the current population (<600 m³/capita/yr)
- ✓ Egypt reuses over 25% of the water to meet current demand
- ✓ Upstream projects may reduce this limited resource adding to WATER STRESS



Why to study WEE ?

- To participate in solving Egypt's top-priority challenges (Water Shortages and Environmental Problems)
 - ✓ **Water Sacristy** (GW development + Desalination + Irrigation improvement)
 - ✓ **Only 45% Connected to sewer network in Egypt**, 16 B LE/year till 2030
 - ✓ **Inland navigation to be increased from 2% to 10%** 400 M LE/year for 5 years
 - ✓ Pollution reduction in canals, drains, and groundwater (major water resources now)
 - ✓ **East Suez Canal projects**



Why to study WEE ?

- Scholarships (HCWW, MWRI, industry.....)
- Max. of 30 students (One-One student/faculty relation)
- High market demand (100% employment)
- Local and international training opportunities
- Practical training (software and field investigations)

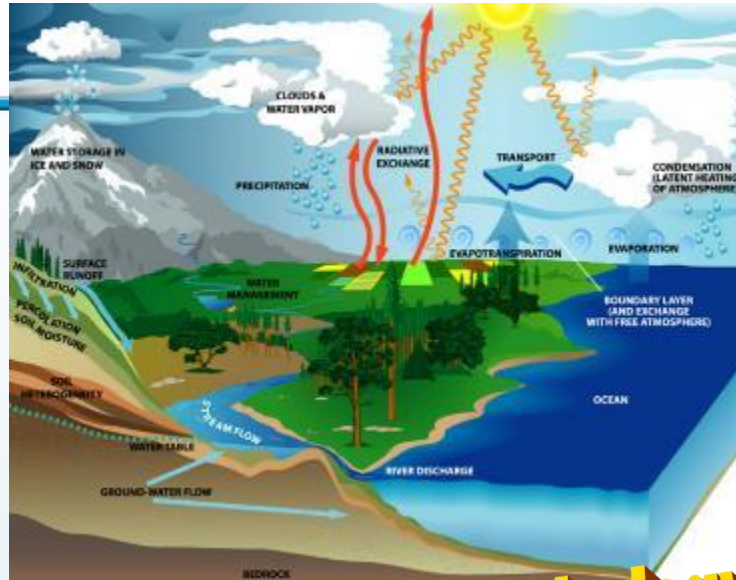


What are the main fields of study?

- You are a Civil Engineer
- You will be studying about 70% shared courses with civil
- You will be focusing on water & Environment
- Your focusing subjects include

Cr Hrs	Freshman	Sophomore	Junior	Senior I	Senior II
1	University Requirement 6 cr hrs	University Requirement 4 cr hrs	University Requirement 8 cr hrs	University Requirement 6 cr hrs	College Requirement 6 cr hrs
2					
3					
4					
5					
6					
7	College Requirement 30 cr hrs	College Requirement 13 cr hrs	College Requirement 10 cr hrs	College Requirement	Civil Engineering Requirement 6 cr hrs
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		Civil Engineering Requirement 16 cr hrs	Civil Engineering Requirement 13 cr hrs	Civil Engineering Requirement 13 cr hrs	
		Water Eng & Environment Requirement	Water Eng & Environment Requirement 5 cr hrs	Water Eng & Environment Requirement 14 cr hrs	Water Eng & Environment Requirement 25 cr hrs

WEE Curriculum

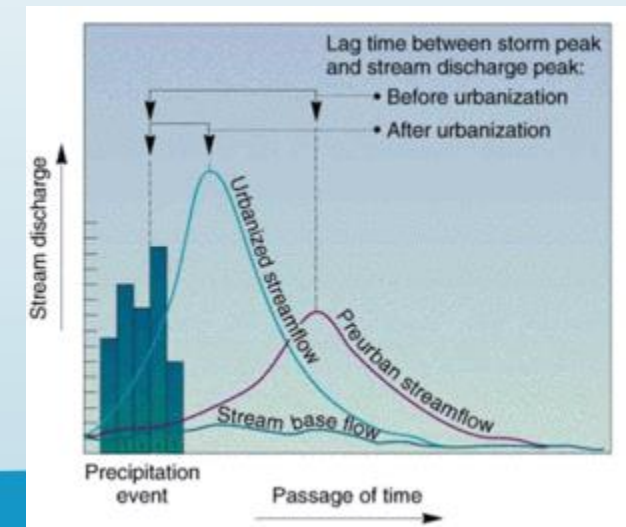
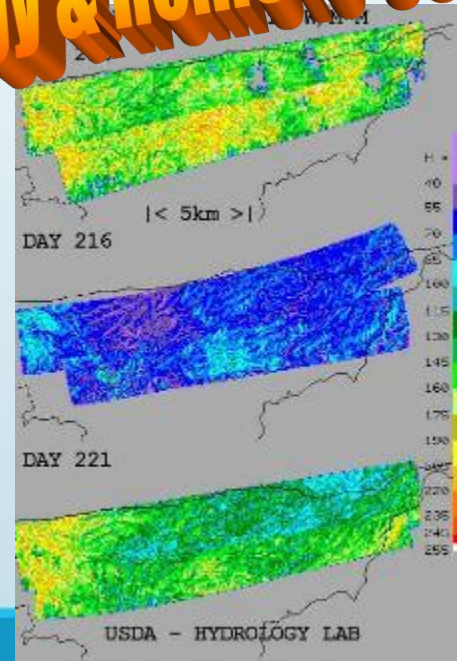
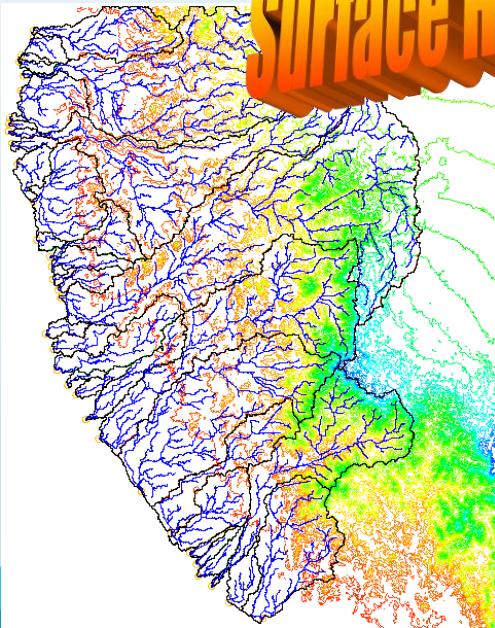


Watershed
boundary

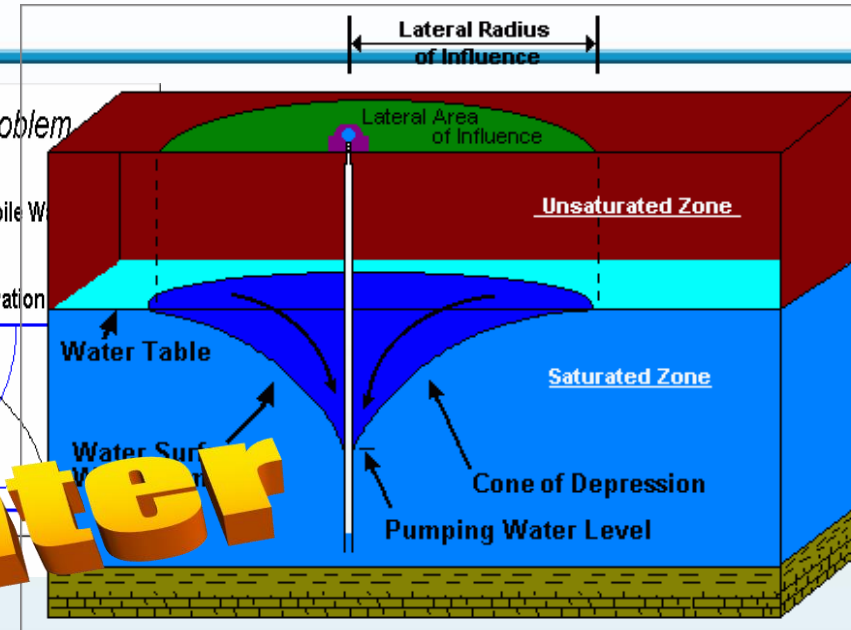
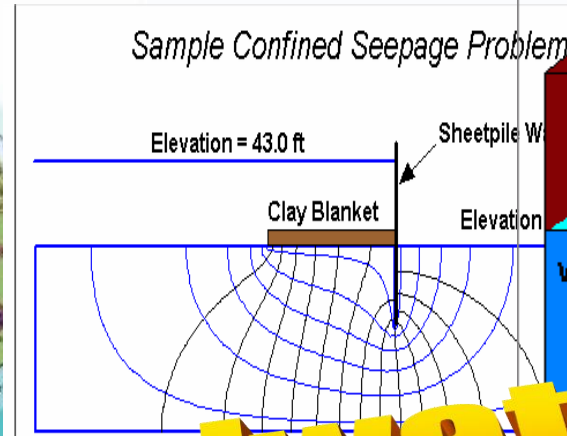


Delineation of a watershed boundary

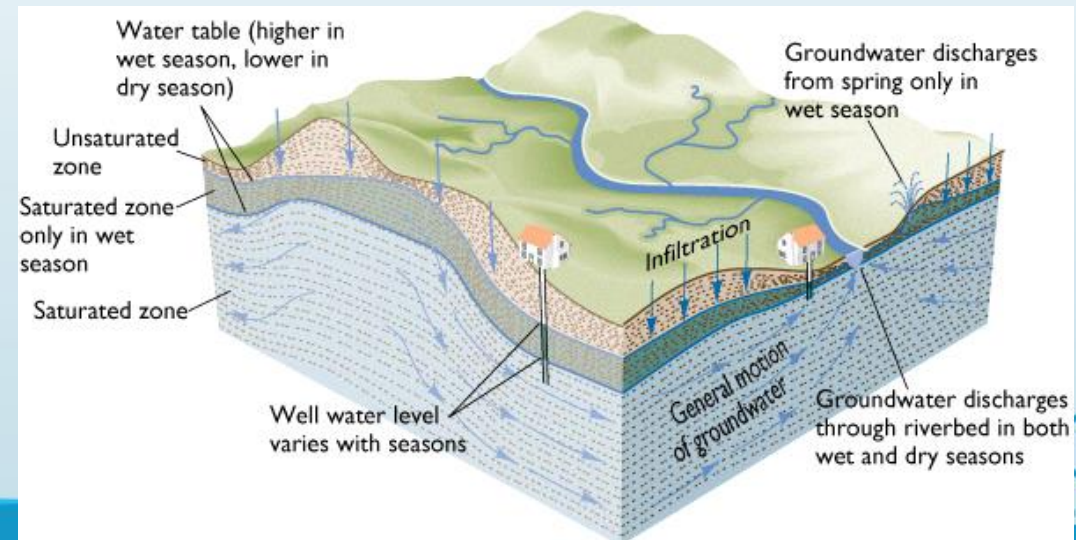
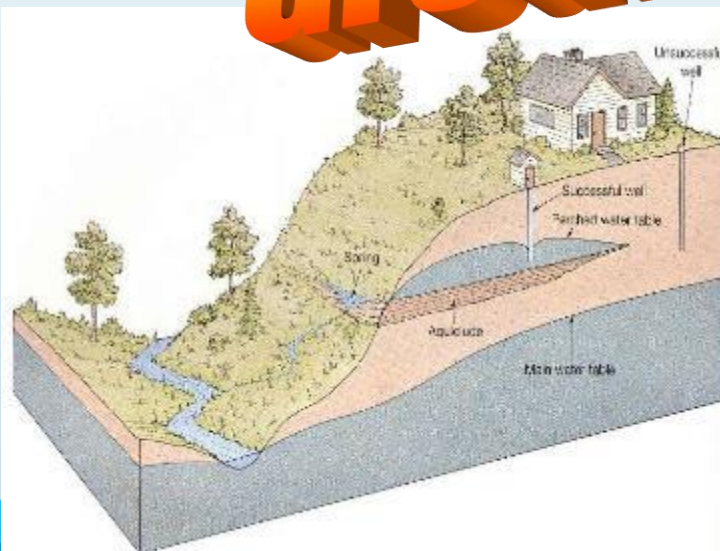
Surface Hydrology & Remote Sensing



WEE Curriculum



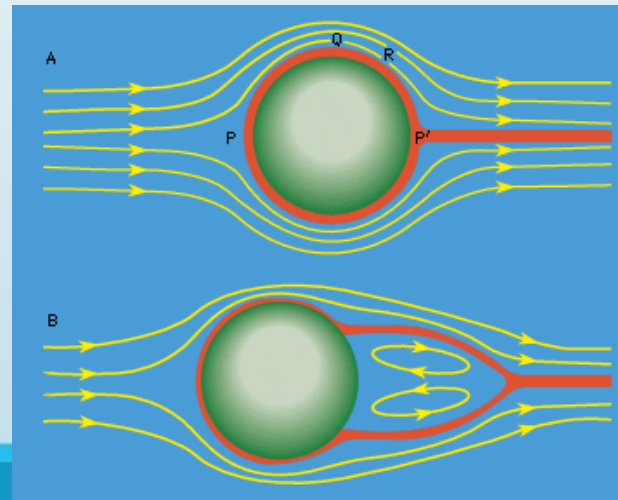
Groundwater



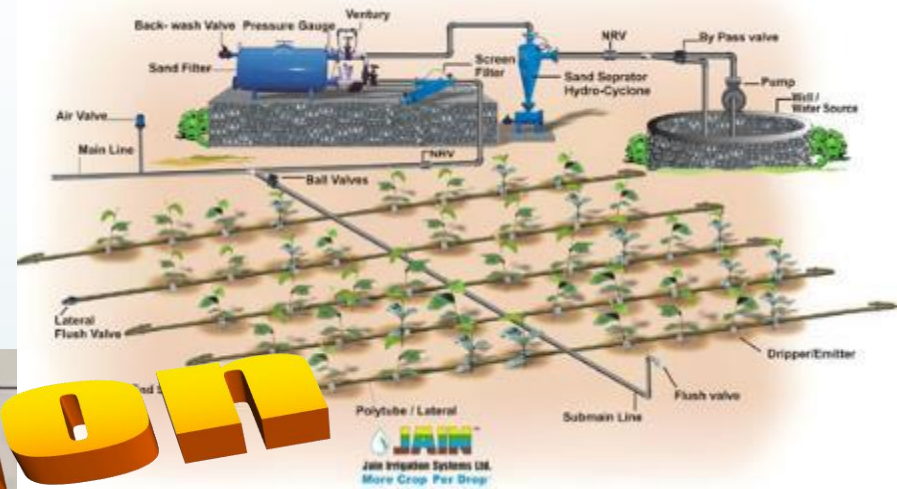
WEE Curriculum



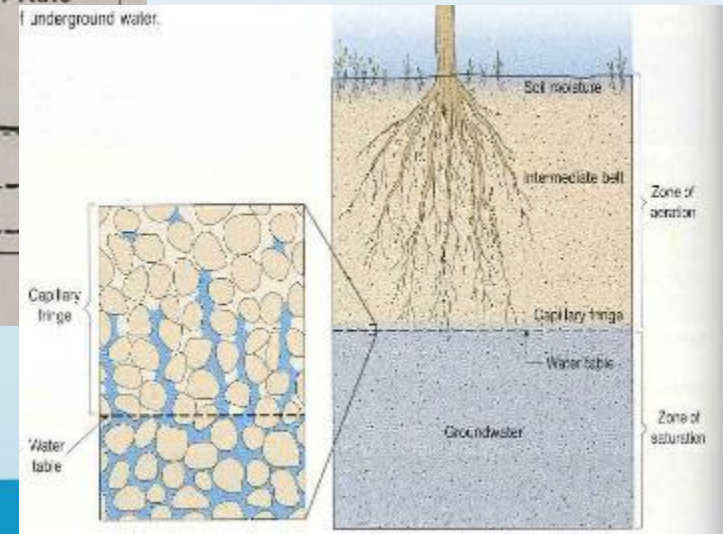
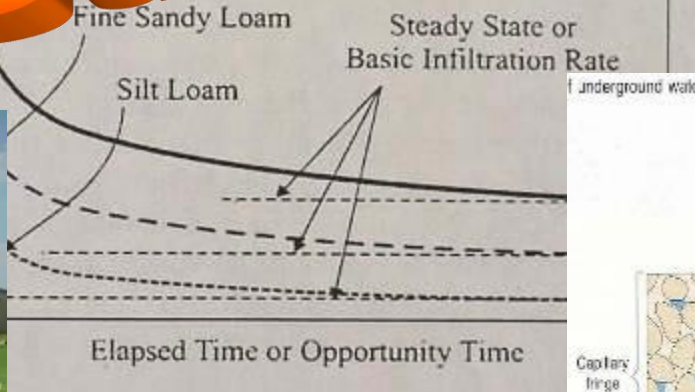
Fluid Mechanics, Pipenetwork & Hydraulics



WEE Curriculum

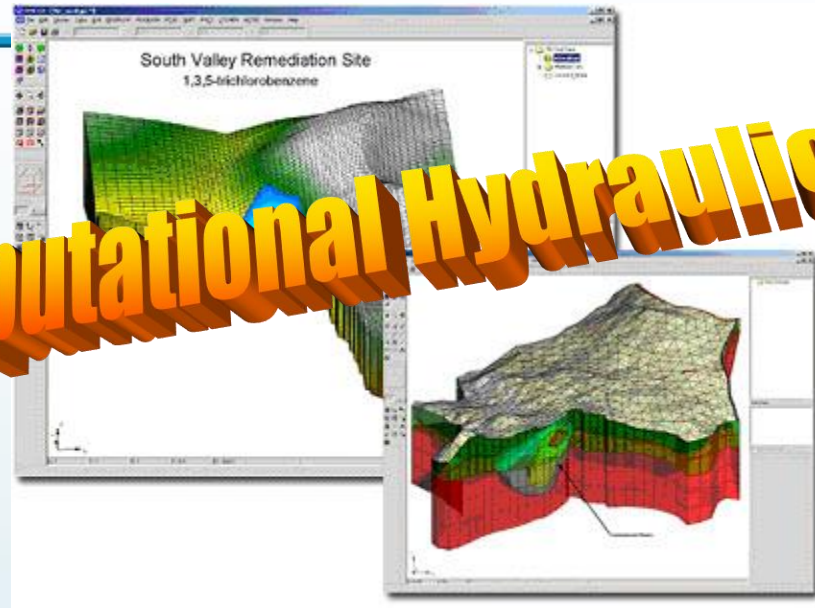


Irrigation

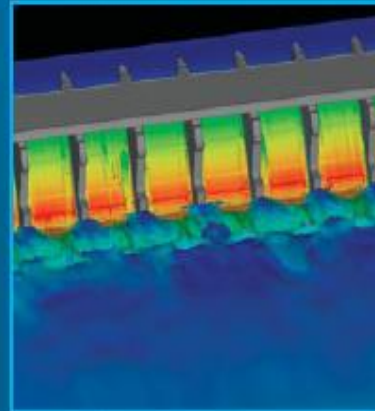
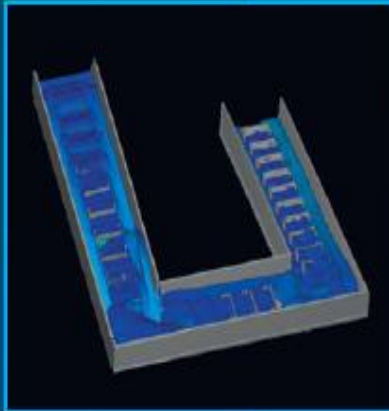
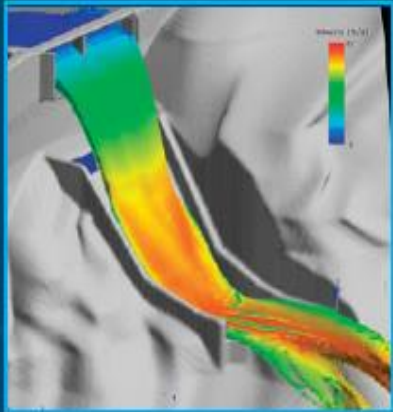


WEE Curriculum

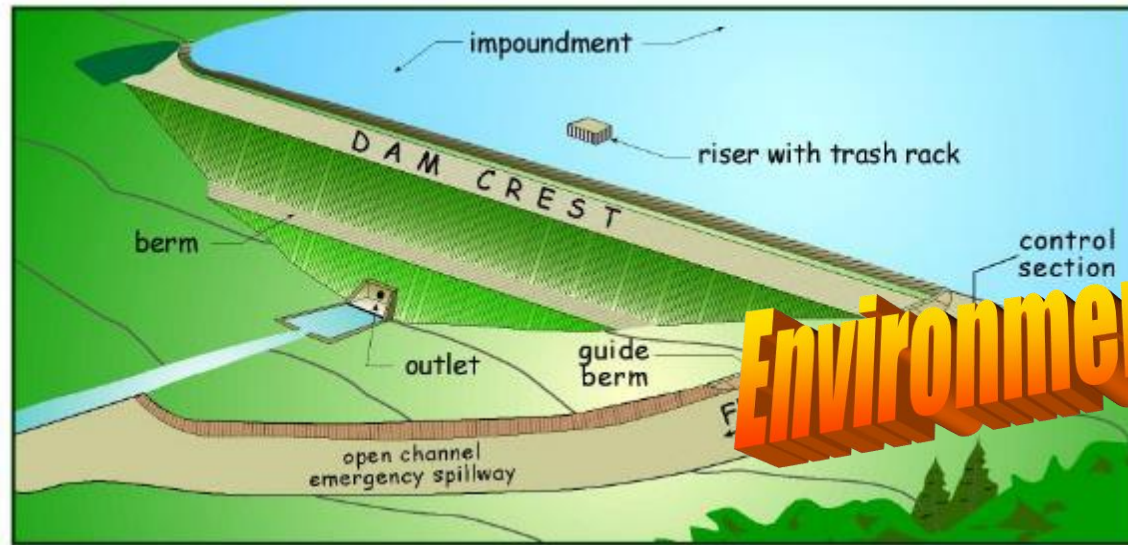
Computational Hydraulics



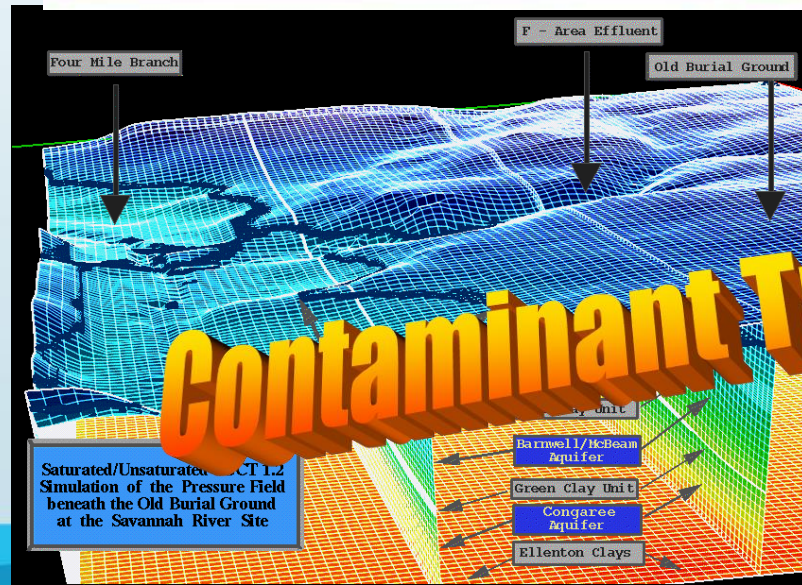
Costal Engineering



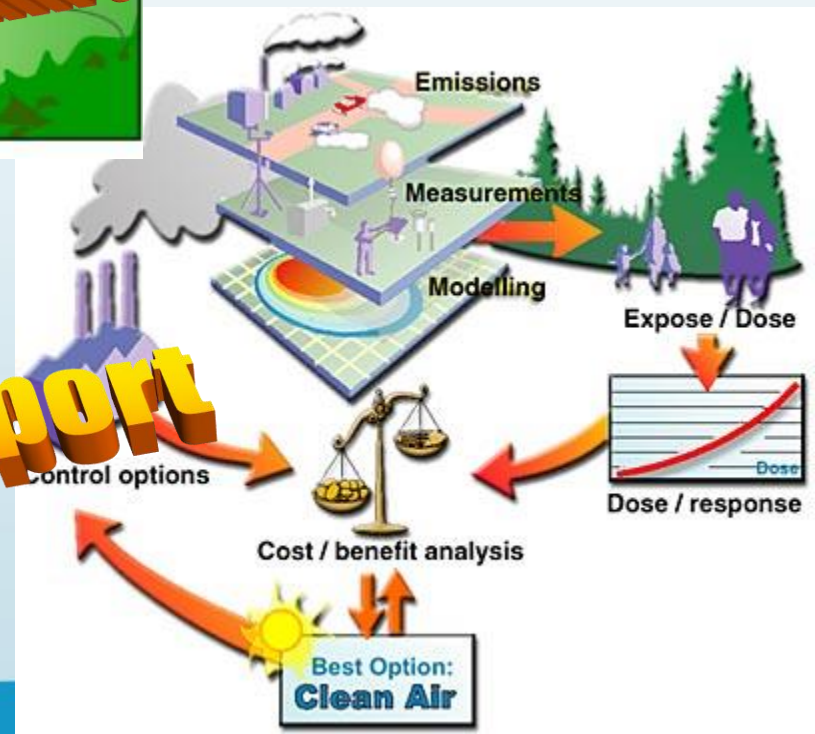
WEE Curriculum



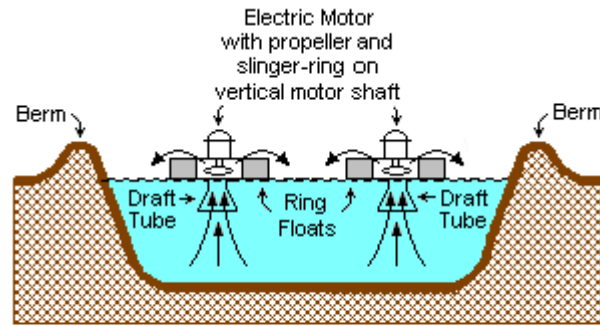
Environmental Assessment



Contaminant Transport



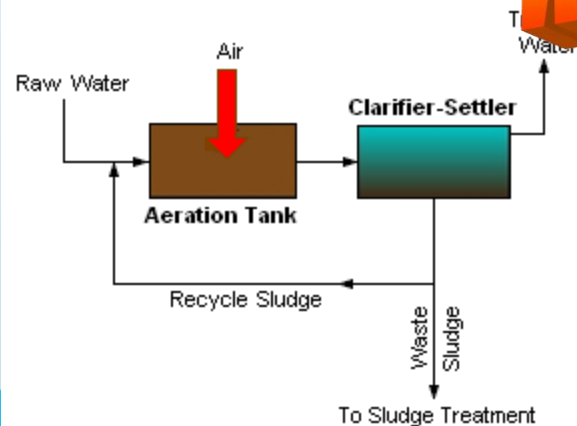
WEE Curriculum



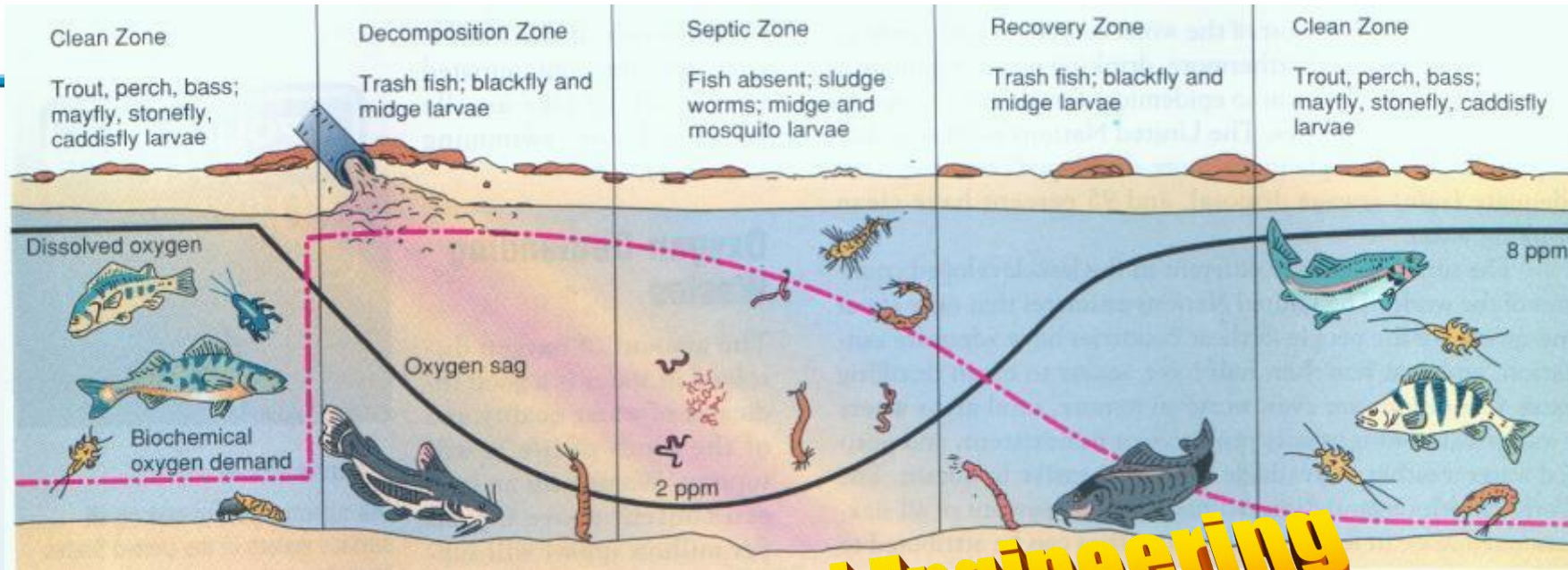
A TYPICAL SURFACE – AERATED BASIN

Note: The ring floats are tethered to posts on the berms.

Water & Waste Treatment



WEE Curriculum

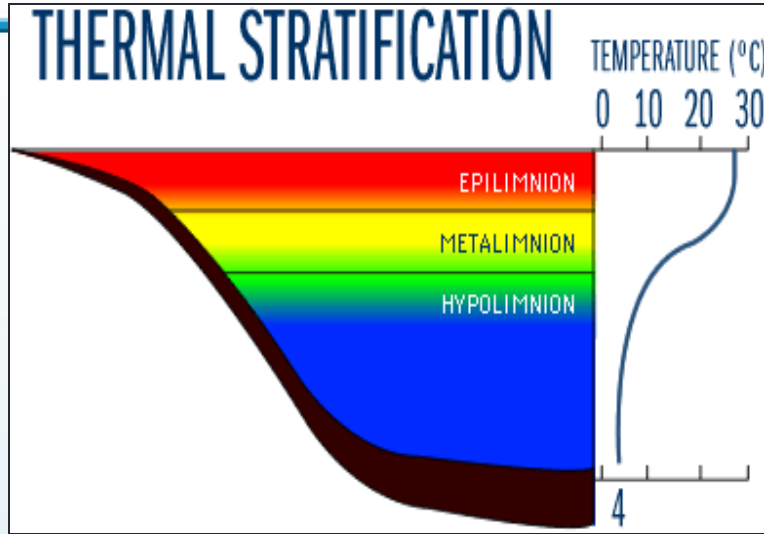


non-renewable resources

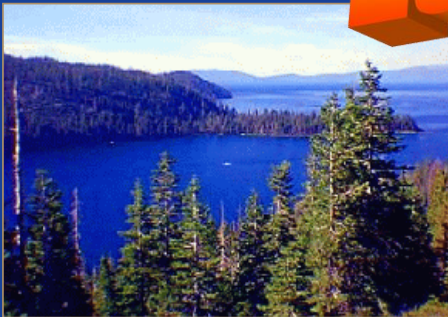
Environmental Engineering



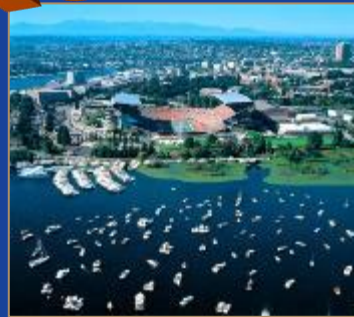
WEE Curriculum



Lake Ecology



IHDN 402



Environmental and Municipal Hydraulics
Lectures 13 - 14



Do I need practical training to get a good job after graduation?



Site Visit Module



- Site visits provide an excellent shop window for many career opportunities.
- The association of the program with **MWRI** and **HCWW** allow a great chance for **WEE** students to acquire appropriate technical proficiency in the water and environmental engineering



Understanding the environment begins with measuring its parameters



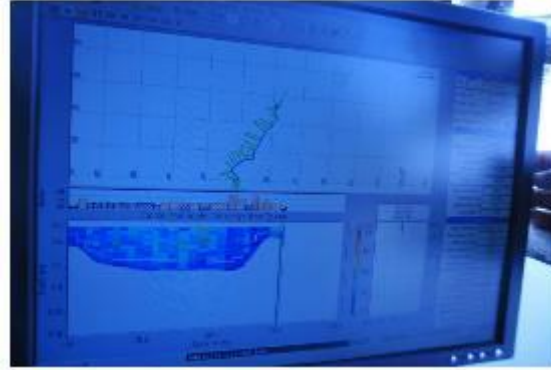
Groundwater Hydrology



Surface Flow Hydrology



River & Stream Flow



Water quality aspects



National Training



HCWW



- Water treatment process
- WW treatment process



MWRI

- Egyptian Public Authority for Drainage Projects (EPADP)
- Designing an irrigation drainage network
- Field and farm measurements
- Visit to drainage network construction site.



INTERNATIONAL TRAINING







In cooperation with Duravit Egypt we support the student's summer training of the faculty of engineering - Cairo University. Yesterday we had the honor of welcoming 20 students at our headquarters – everybody had a great time during this exciting intercultural exchange.





GEBERIT





تستضيف جروندفوس مصر 19 طالباً من كلية هندسة القاهرة

Updated about 7 months ago

تستضيف حالياً جروندفوس مصر ما يقارب العشرين طالباً في الدائماتك و
لعدة أسابيع على أن تتضمن الزيارات التطبيقية و زيارات المصانع كذلك
متحف الشركة و الأكاديمية التطبيقية

GRUNDFOS



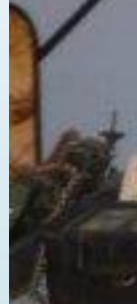
CONFERENCES

The 1st Conference For Sustainable Water Supply & Sanitation



هندسة المياه و البيئة
جامعة القاهرة

المدارس
الثانوية الفنية





interbuild
egypt





interbuild
egypt



ملتقى الشباب العربي الافريقي الدولي



World Water Forum, France, 2011



MARSEILLE, FRANCE '12



TIME FOR SOLUTIONS



MARSEILLE, FRANCE '12



TIME FOR SOLUTIONS

Does WEE offer scholarships & How do I apply?

- Some scholarships are secured through the Holding company for water & Waste water
- You don't have to apply for scholarships—these are assigned based on student GPA

What kind of jobs will I be offered after graduation?

- As a **Civil Engineer** you can work in any civil engineering discipline with some training



Geotechnical Engineering



Construction Supervision



Structural Design



WWTP / WTP



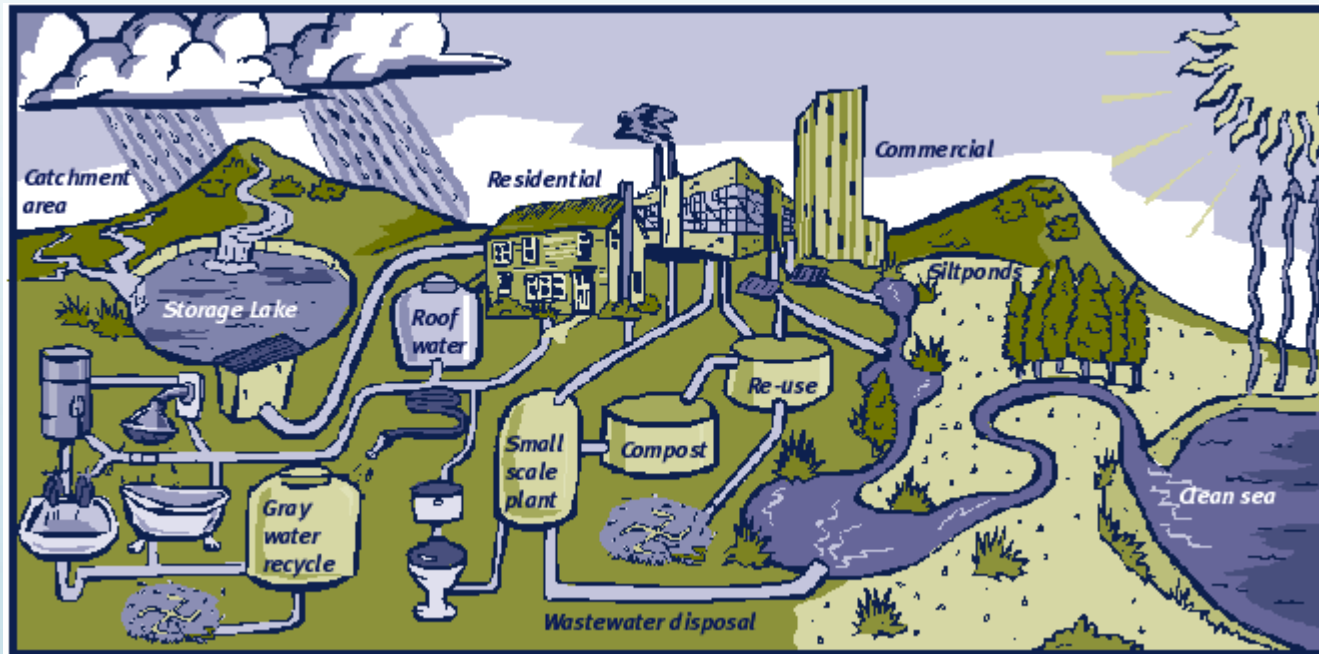
Roads

What kind of jobs will I be offered after graduation?

- As a **Water & Environmental Eng.** you can work in flood protection, stormwater management, water resources management, water distribution networks design, wastewater collection network design and supervision, water and wastewater treatment plants, solid waste management, environmental protection, irrigation design works



Stormwater Management



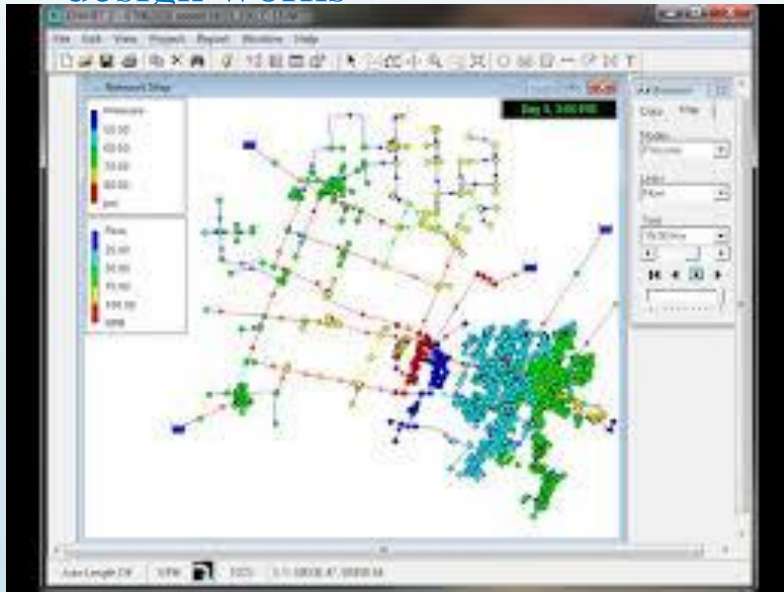
Integrated Water Resources Management



Environmental Protection

What kind of jobs will I be offered after graduation?

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Water/Wastewater networks design



WTPs/ WWTPs



Solid Waste Management

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Marina/ Harbour Planning



Modern Irrigation systems



Hydraulic Structures

How much money can I expect to make as an engineer?

- There will always be a need for skilled engineers in industry, academia, government and non-profit organizations.
- What you make in salary depends a great deal on the job, the location and how much education and experience you bring to the negotiating table

Our Alumni



The overflowing benefits



- ❑ Careers in water are **SECURE!**

- ❑ Careers in water have room for **GROWTH!**

- ❑ Careers in water have **COMPETITIVE** salaries, benefits and more!

JUMP! Into Your Future Career In Water



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