LIGHT POLLUTION
HAS ANY OF YOU SEEN THE MILKY WAY?
WHY CAN’T WE SEE THE MILKY WAY??

• About 100 years ago anyone in the U.S. could see the Milky Way Galaxy with their naked eyes.
• Today, it is possible to see the Milky Way only in less than 60% of the country.
• The reason we can not see thousands of beautiful stars at night is light pollution.
WHAT IS LIGHT POLLUTION?

• Light pollution occurs when there is inefficient and excessive use of artificial lighting at night.

• There are four types of light pollution:
  • Overillumination - occurs when unnecessarily large amounts of artificial lighting is used for an activity.
  • Glare - comes from unshielded light that shines horizontally and causes discomfort.
  • Light trespass - is an undesirable light spillover from the intended target to a nearby property.
  • Sky glow - can be described as a pink cloud over a city, which can be seen for miles.
LIGHT POLLUTION IN THE US

Source: NASA
SAN FRANCISCO WITH AND WITHOUT LIGHT POLLUTION
WHY SHOULD WE CARE?

- Light pollution negatively impacts animals, the environment and even humans:
  - causes serious damage to animals’ reproductive and survival abilities;
  - changes breeding cycles of fish, turtles and insects;
  - disturbs bird migration patterns leading to thousand of bird deaths each year;
  - Limits trees’ ability to adapt to seasonal changes, which in turn disrupts animal life that depends on these trees for their natural habitat.
Light pollution has psychological and physical effects on humans.

Some research suggests links between artificial light exposure and insomnia, depression and even cancer.

Light pollution deprives us of the ability to see and enjoy millions of magnificent stars at night.
WHY SHOULD WE CARE?

• Light pollution is one of the fastest growing forms of environmental pollution.

• Today more than 54% of the world’s population lives in cities.

• More than 66% of people on our planet is expected to live in cities by 2050.

• This trend will only make light pollution worse, unless we start doing something about this problem today.
WHAT CAN YOU DO TO DECREASE LIGHT POLLUTION?

• Use nighttime lights only when necessary.
• Reduce the amount of lighting used.
• Direct lights downward.
• Replace outdoor lights with efficient light fixtures.
• Close blinds and curtains at night to keep the light inside.
THANK YOU!
REFERENCES


• United Nations, Department of Economic and Social Affairs, Population Division. (2014).