



RICE[®]

Houston, Texas
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STORMWATER MANAGEMENT IN THE INSTITUTE FOR SUSTAINABLE INFRASTRUCTURE'S ENVISION[™] RATING SYSTEM

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TOPICS

- Who is ISI?
- Why a New Rating System?
- Envision Rating System Overview
- Water and Stormwater Aspects of Envision
- Project Verification Process
- Envision by the Numbers

WHO IS ISI?



ISI MEMBERS

- **Charter**
(\$25,000 fee)
- **Sustaining**
(\$500 to \$7,5000 annual dues)
- **Public Sector**
 - Los Angeles, CA
 - Oakland, CA
 - Los Angeles County, CA
 - Santa Barbara, CA
 - Oceanside, CA
 - Eugene, OR
 - Austin, TX
- **Public Sector**
(continued)
 - Houston, TX
 - Griffin, GA
 - Springfield, MO
 - Highland Park, IL
 - DeKalb, IL
 - Oak Park, IL
 - Plainfield, IL
 - Chelsea, MA
 - Plymouth, MA
 - Westwood, MA
- **Academia**

WHY A NEW RATING SYSTEM?

WHY WAS ENVISION DEVELOPED?

- Current rating systems for infrastructure in the U.S. are sector specific
- No U.S. system covers all aspects of infrastructure
- Envision is designed to fill the gap



Envision = “LEED for Horizontal Projects”

HUMAN DEVELOPMENT INDEX VS. ECOLOGICAL FOOTPRINT

1 hectare = 100 meters by 100 meters = 2.47 acres
 Land Area of Earth = 14.8 billion hectares
 Population = 7.048 billion
 Current "Load" = 2.09 people/hectare

Sustainable
 "Ecological
 Footprint" = 1.79
 hectares per
 person

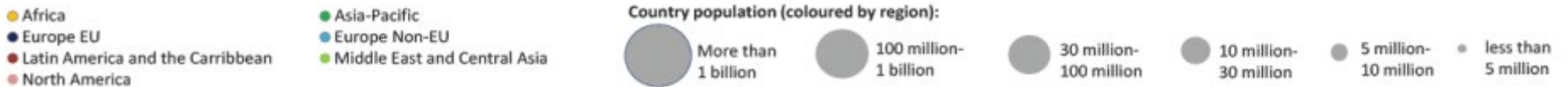
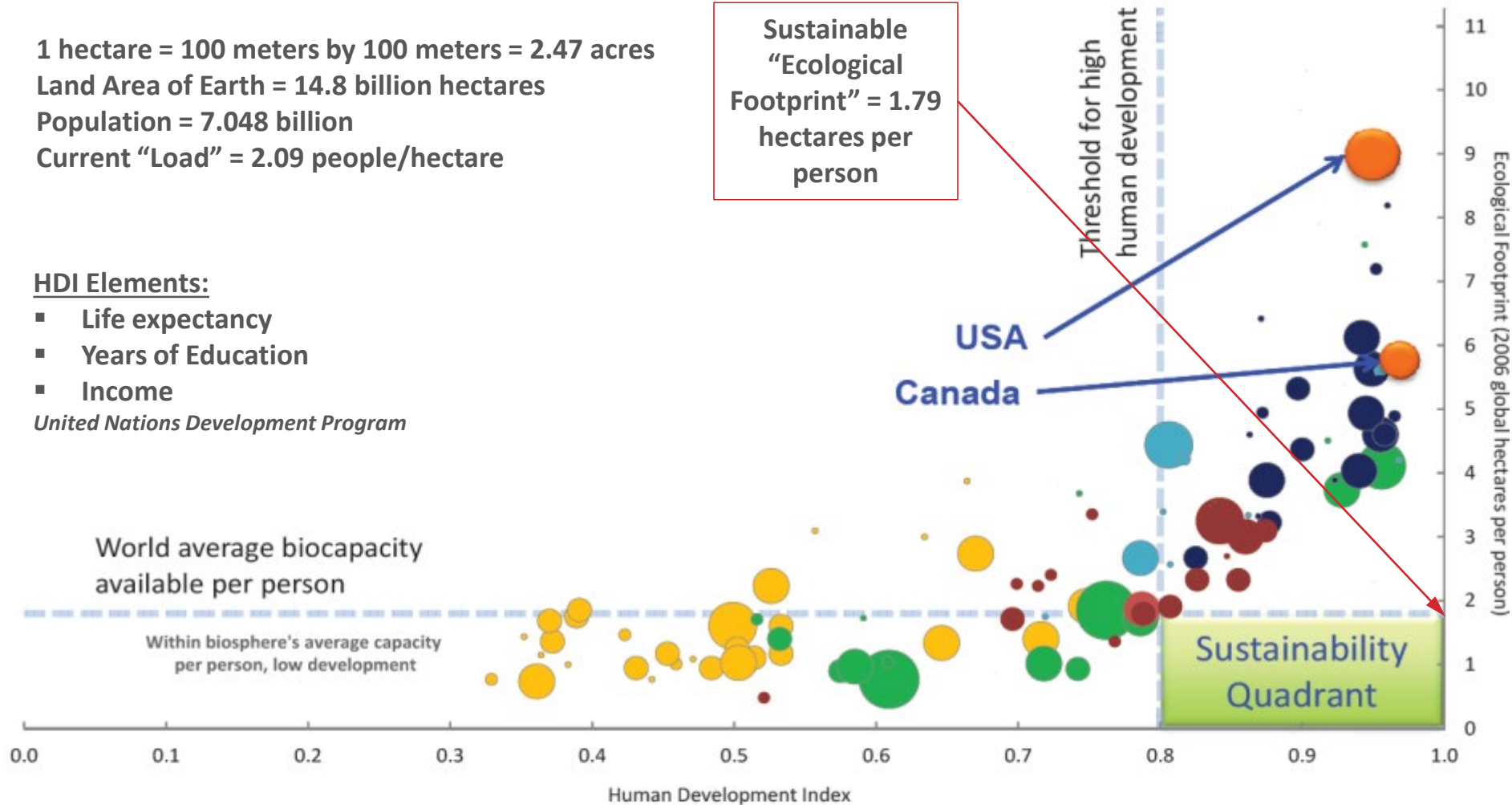
HDI Elements:

- Life expectancy
- Years of Education
- Income

United Nations Development Program

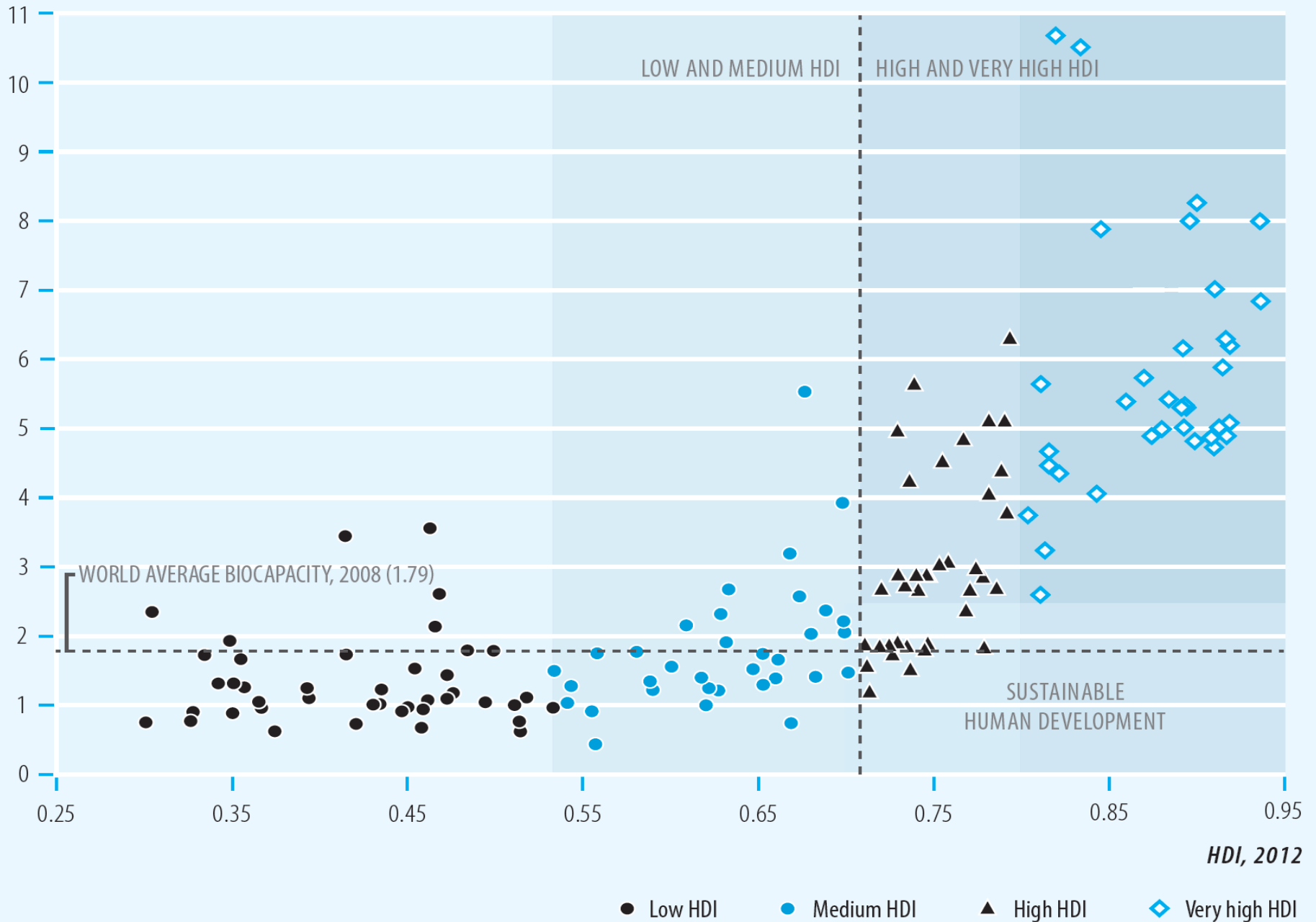
World average biocapacity
 available per person

Within biosphere's average capacity
 per person, low development

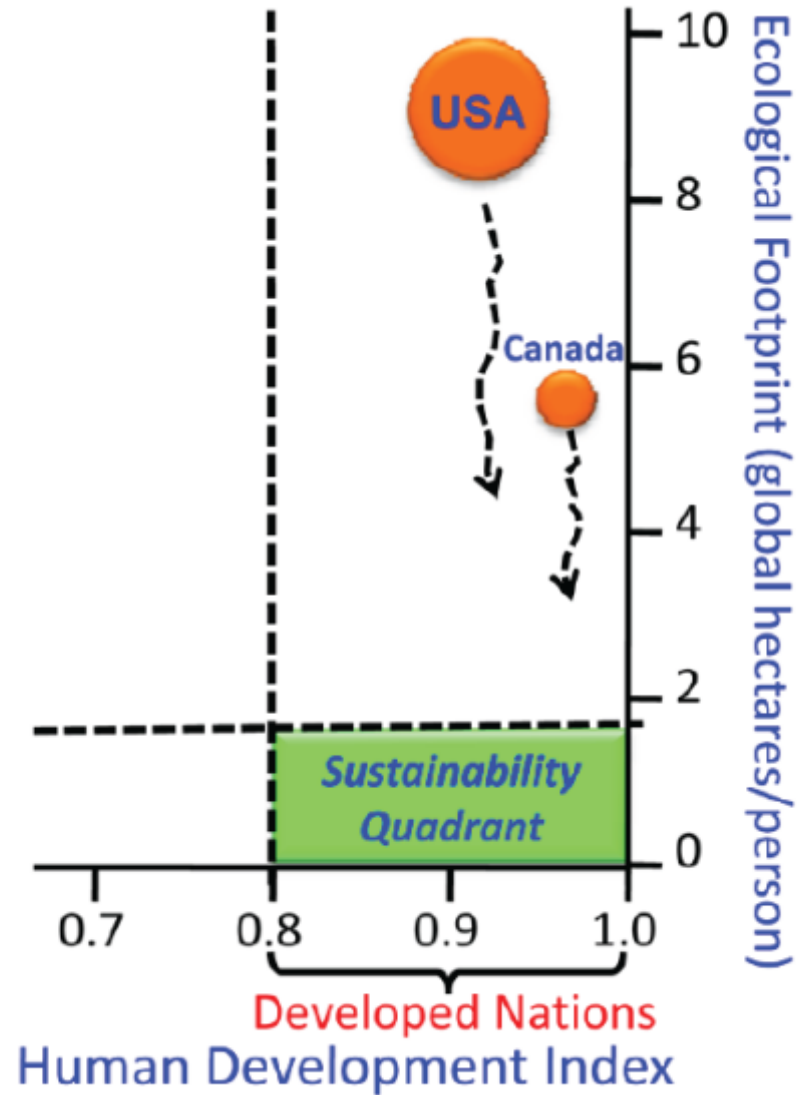


SOURCE: ISI, 2012, adapted from *Living Planet Report 2006*, World Wildlife Fund.

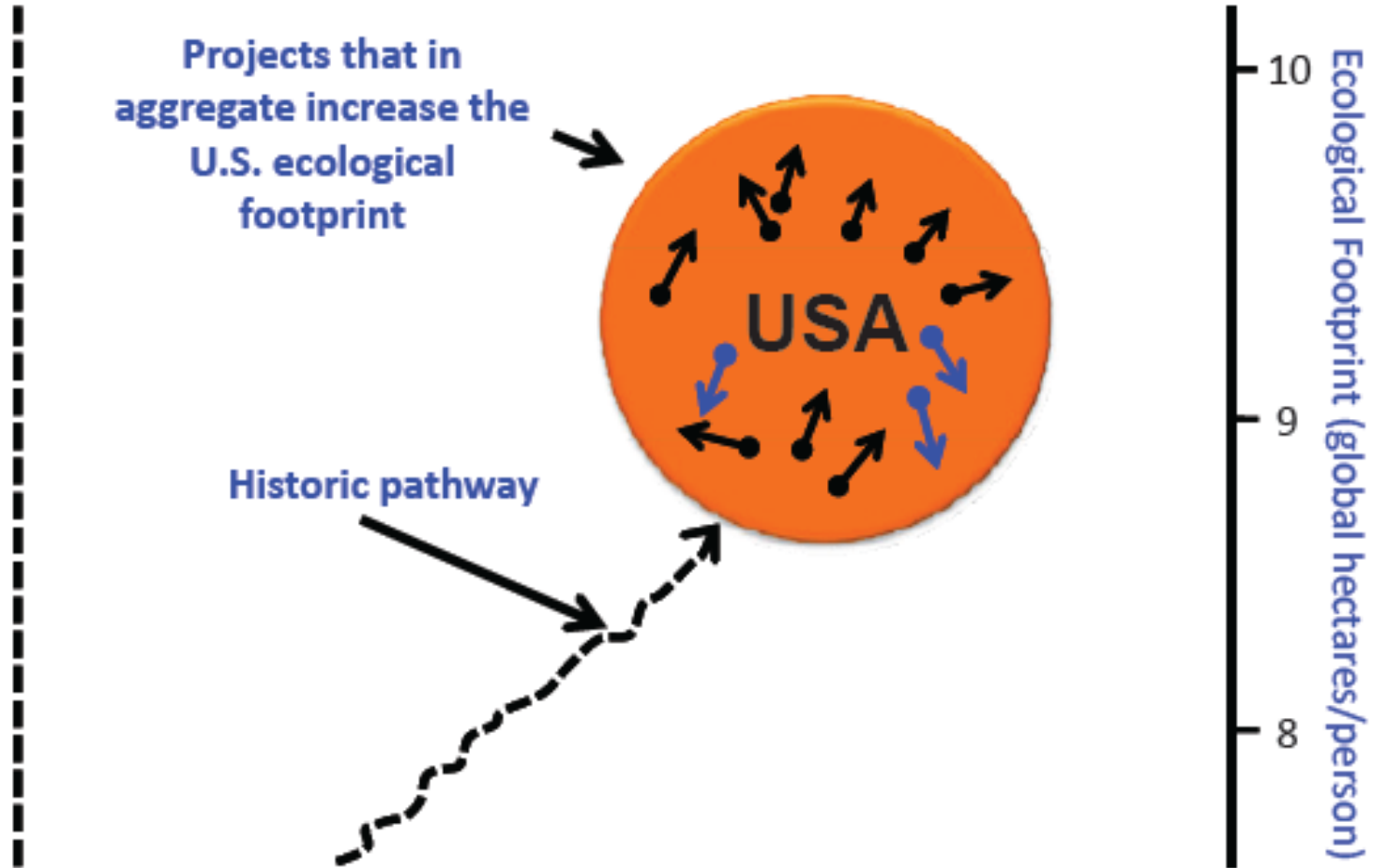
Ecological footprint, 2007 (global hectares per capita)



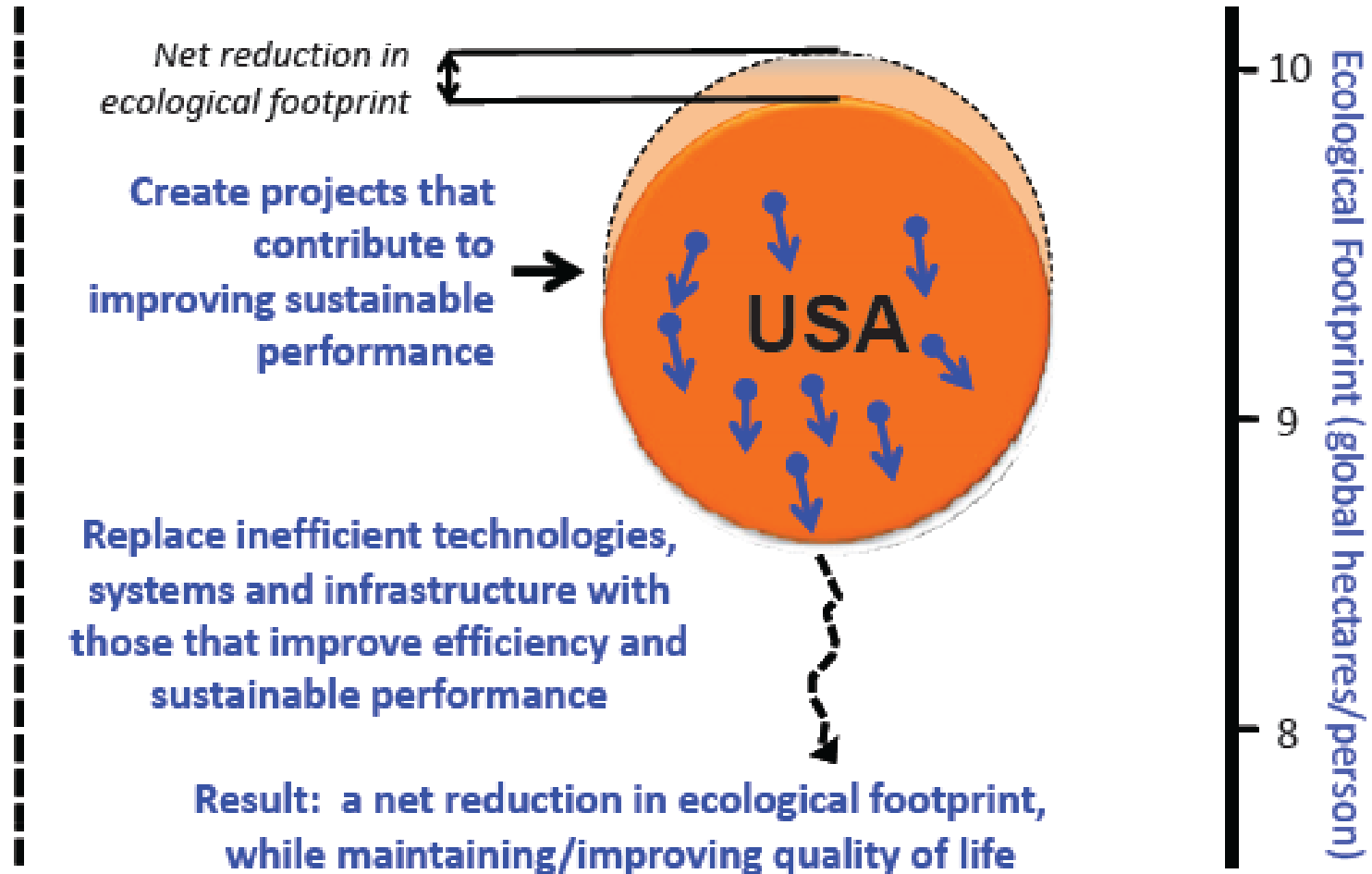
HUMAN DEVELOPMENT INDEX VS. ECOLOGICAL FOOTPRINT



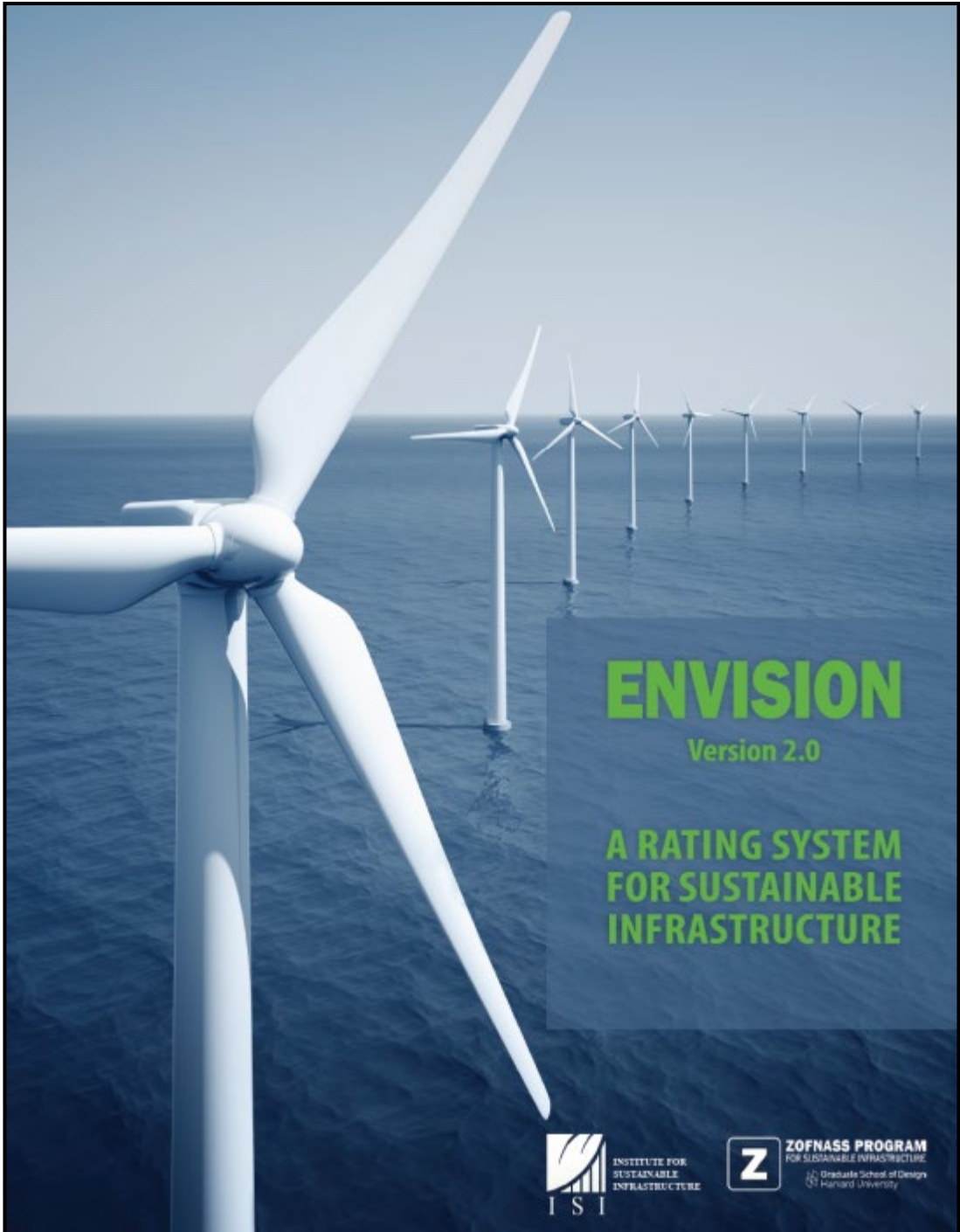
HUMAN DEVELOPMENT INDEX VS. ECOLOGICAL FOOTPRINT



HUMAN DEVELOPMENT INDEX VS. ECOLOGICAL FOOTPRINT



ENVISION RATING SYSTEM OVERVIEW



ENVISION

Version 2.0

A RATING SYSTEM
FOR SUSTAINABLE
INFRASTRUCTURE



ZOFNASS PROGRAM
FOR SUSTAINABLE INFRASTRUCTURE
Graduate School of Design
Harvard University

ENVISION CHARACTERISTICS

- Envision applies to all civil infrastructure
- Addresses design, planning, construction and maintenance
- Applicable at any point in an infrastructure project's life cycle
- Speaks to the triple bottom line: social, economic and environmental goals
- Designed to keep pace with a changing concept of sustainability



WHAT TYPES OF INFRASTRUCTURE?



ENERGY

Geothermal
Hydroelectric
Nuclear
Coal
Natural Gas
Oil/Refinery
Wind
Solar
Biomass



WATER

Potable water distribution
Capture/Storage
Water Reuse
Storm Water Management
Flood Control



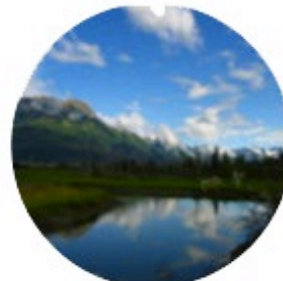
WASTE

Solid waste
Recycling
Hazardous Waste
Collection & Transfer



TRANSPORT

Airports
Roads
Highways
Bikes
Pedestrians
Railways
Public Transit
Ports
Waterways



LANDSCAPE

Public Realm
Parks
Ecosystem Services



INFORMATION

Telecommunications
Internet
Phones
Satellites
Data Centers
Sensors

OPPORTUNITY SPACE AND LEVELS OF ACHIEVEMENT



60 CREDITS IN 5 CATEGORIES



QUALITY OF LIFE

13 Credits

Purpose, Community, Wellbeing



LEADERSHIP

10 Credits

Collaboration, Management, Planning



RESOURCE ALLOCATION

14 Credits

Materials, Energy, **Water**



NATURAL WORLD

15 Credits

Siting, Land & **Water**, Biodiversity



CLIMATE AND RISK

8 Credits

Emissions, Resilience

POINT SYSTEM

LEVELS OF ACHIEVEMENT	IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
Max Points	79	178	355	700	514



QUALITY OF LIFE

	Improved	Enhanced	Superior	Conserving	Restorative
PURPOSE					
QL1.1 Improve community quality of life	2	5	10	20	25
QL1.2 Stimulate sustainable growth and development	1	2	5	13	16
QL1.3 Develop local skills and capabilities	1	2	5	12	15
COMMUNITY					
QL2.1 Enhance public health and safety	2			16	
QL2.2 Minimize noise and vibration	1			8	11
QL2.3 Minimize light pollution	1	2	4	8	11
QL2.4 Improve community mobility and access	1	4	7	14	
QL2.5 Encourage alternative modes of transportation	1	3	6	12	15
QL2.6 Improve site accessibility, safety and wayfinding		3	6	12	15
WELLBEING					
QL3.1 Preserve historic and cultural resources	1		7	13	16
QL3.2 Preserve views and local character	1	3	6	11	14
QL3.3 Enhance public space	1	3	6	11	13
	13	27	62	150	151

SOURCES

- W. A. Wallace, Project Sustainability Management Guidelines, Unpublished manuscript, September 2010.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 6.1: Promote equitable site development, Credit 6.2: Promote equitable site use.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 6.7: Provide views of vegetation and quiet outdoor spaces for mental restoration.
- City of Portland, Oregon, Noise Control Ordinance, City Code and Charter, Title 18, Chapter 18, Section 18.10.010, Land Use Zones.
- CEEQUAL Assessment Manual for Projects Version 4, December 2008, Roger K. Venables, Section 11.3.
- Municipal Research and Services Center of Washington (MRSC), Light Nuisances - Ambient Light, Light Pollution Glare <http://www.mrsc.org/subjects/legal/nuisances/nu-light.aspx> , \
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 1.6: Select sites within existing communities.
- Greenroads Manual v1.5, AE-5: Pedestrian Access, AE-6: Bicycle Access, AE-7: Transit and HOV Access, <http://www.greenroads.us>
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 6.5: Provide for optimum site accessibility, safety, and wayfinding.
- Greenroads Manual, v1.5, 2011, Access & Equity, AE-8 Scenic Views



LEADERSHIP

	Improved	Enhanced	Superior	Conserving	Restorative	
		2	4	9	17	
		1	4	7	14	
		1	4	8	15	
		1	5	9	14	
		1	3	6	12	15
		1	3	7	13	16
		1	3		10	
		1	2	4	8	
		1	3	6	12	
		10	31	56	115	31

COLLABORATION	LD1.1 Provide effective leadership and commitment
	LD1.2 Establish a sustainability management system
	LD1.3 Foster collaboration and teamwork
	LD1.4 Provide for stakeholder involvement
MNGMT.	LD2.1 Pursue by-product synergy opportunities
	LD2.2 Improve infrastructure integration
PLANNING	LD3.1 Plan for long-term monitoring and maintenance
	LD3.2 Address conflicting regulations and policies
	LD3.3 Extend useful life

SOURCES

- W. A. Wallace, Project Sustainability Management Guidelines, Unpublished manuscript, September 2010.
- CEEQUAL Assessment Manual for Projects Version 4, December 2008, Roger K. Venables, Section 12.1, 12.2, 12.3.



RESOURCE ALLOCATION

	Improved	Enhanced	Superior	Conserving	Restorative	
MATERIALS	RA1.1 Reduce net embodied energy	2	6	12	18	
	RA1.2 Support sustainable procurement practices	2	3	6	9	
	RA1.3 Use recycled materials	2	5	11	14	
	RA1.4 Use regional materials	3	6	9	10	
	RA1.5 Divert waste from landfills	3	6	8	11	
	RA1.6 Reduce excavated materials taken off site	2	4	5	6	
	RA1.7 Provide for deconstruction and recycling	1	4	8	12	
ENERGY	RA2.1 Reduce energy consumption	3	7	12	18	
	RA2.2 Use renewable energy	4	6	13	16	20
	RA2.3 Commission and monitor energy systems		3		11	
WATER	RA3.1 Protect fresh water availability	2	4	9	17	21
	RA3.2 Reduce potable water consumption	4	9	13	17	21
	RA3.3 Monitor water systems	1	3	6	11	
SOURCES	29	66	112	170	62	

SOURCES

- CEEQUAL Assessment Manual for Projects Version 4, December 2008, Roger K. Venables, Sections 7.1.1, 7.1.2.
- Canadian Architect, Measures of Sustainability, Embodied energy, http://www.canadianarchitect.com/asf/perspectives_sustainability/measures_of_sustainability/measures_of_sustainability_embodied.htm
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 5.10: Support sustainable practices in materials manufacturing, Credit 5.6: Use certified wood.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 5.5: Use recycled content materials.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 5.3: Design for deconstruction and disassembly.
- U.S. Environmental Protection Agency, Environmentally Preferable Purchasing, <http://www.epa.gov/oppt/epp/pubs/products/construction.htm>
- Forest Stewardship Council, <http://www.fsc.org/>
- Sustainable Forestry Initiative, Section 2. SFI 2010-2014 Standard, <http://www.sfiprogram.org/>
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 5.7: Use regional materials.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 7.4: Divert construction and demolition materials from disposal.



NATURAL WORLD

		Improved	Enhanced	Superior	Conserving	Restorative	
SITING	NW1.1 Preserve prime habitat				9	14	18
	NW1.2 Protect wetlands and surface water		1	4	9	14	18
	NW1.3 Preserve prime farmland				6	12	15
	NW1.4 Avoid adverse geology		1	2	3	5	
	NW1.5 Preserve floodplain functions		2	5	8	14	
	NW1.6 Avoid unsuitable development on steep slopes		1			4	6
	NW1.7 Preserve greenfields		3	6	10	15	23
L&W	NW2.1 Manage stormwater			4	9	17	21
	NW2.2 Reduce pesticide and fertilizer impacts		1	2	5	9	
	NW2.3 Prevent surface and groundwater contamination		1	4	9	14	18
BIODIVERSITY	NW3.1 Preserve species biodiversity		2			13	16
	NW3.2 Control invasive species				5	9	11
	NW3.3 Restore disturbed soils					8	10
	NW3.4 Maintain wetland and surface water functions		3	6	9	15	19
		15	33	86	165	169	

SOURCES

- CEEQUAL Assessment Manual for Projects Version 4, December 2008, Roger K. Venables, Section 4.1.1.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Prerequisite 1.3: Preserve wetlands, Credit 3.3: Protect and restore riparian, wetland, and shoreline buffers.
- U.S. Army Corps of Engineers Guidance on delineating wetlands.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Prerequisite 1.1: Limit development of soils designated as prime farmland, unique farmland, and farmland of statewide importance.
- U.S. Farmland Protection Policy Act, Section 2 (a) (c) (1), http://www.nrcs.usda.gov/programs/fppa/pdf_files/FPPA_Law.pdf.
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 3.5: Manage stormwater onsite.
- The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 3.4: Rehabilitate lost streams, wetlands, and shorelines.
- I-69 Planning Toolbox, <http://www.in.gov/indot/div/projects/i69planningtoolbox/natres.html>
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Prerequisite 1.2: Protect floodplain functions.
- I-69 Planning Toolbox, Hillside/Steep Slope Protection, http://www.in.gov/indot/div/projects/i69planningtoolbox/_pdf/Hillside_Steep%20Slope%20Protection.pdf
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Credit 1.5: Select brownfields or greyfields for redevelopment.
- ASTM E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process
- Adapted from The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009, Prerequisite 4.1: Control and manage known invasive plants found on site, Prerequisite 4.2: Use appropriate, non-invasive plants.



CLIMATE AND RISK

		Improved	Enhanced	Superior	Conserving	Restorative
Emission	CR1.1 Reduce greenhouse gas emissions	4	7	13	18	25
	CR1.2 Reduce air pollutant emissions	2	6		12	15
Resilience	CR2.1 Assess climate threat				15	
	CR2.2 Avoid traps and vulnerabilities	2	6	12	16	20
	CR2.3 Prepare for long-term adaptability				16	20
	CR2.4 Prepare for short-term hazards	3		10	17	21
	CR2.5 Manage heat islands effects	1	2	4	6	
		12	21	39	100	101

SOURCES

- CEEQUAL Assessment Manual for Projects Version 4, December 2008, Roger K. Venables, Sections 7.1.3, 7.1.4, 7.3.
- California Ambient Air Quality Standards, <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>
- South Coast Air Quality Management District Rules and Regulations, <http://www.aqmd.gov/rules/rulesreg.html>
- W. A. Wallace, Project Sustainability Management Guidelines, Unpublished manuscript, September 2010.
- Firewise Construction Checklist, <http://www.forestry.state.al.us/WUI/Firewise/FirewiseConstructionChecklist.pdf>
- Firewise Landscaping Checklist, <http://www.gohsep.la.gov/factsheets/firelandscaping.pdf>
- U.S. Department of Homeland Security, Federal Emergency Management Agency, "Prepare for a Wildfire", http://www.fema.gov/hazard/wildfire/wf_prepare.shtm

WATER AND STORMWATER ASPECTS OF ENVISION

PROTECT FRESH WATER AVAILABILITY

INTENT: *Reduce the negative net impact on fresh water availability, quantity, and quality.*

METRIC: *The extent to which the project uses fresh water without replenishment.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p>(2) <u>No immediate negatives.</u> Determine water needs. Look for reuse opportunities. Consider peak usage rates. Estimate long term impacts.</p>	<p>(4) <u>Good water management.</u> Assess and control water use over average maximum conditions. Offset peak withdrawals during low water need periods. Reuse water. Assess long term needs.</p>	<p>(9) <u>Wise water management.</u> Design project to use water that can be replenished in quality and quantity. Control water usage over average maximum conditions. Offset peak withdrawals during low water need periods. Determine impacts of water use on aquatic species.</p>	<p>(17) <u>Total water management.</u> No net impact on water supply volumes. Manage runoff to recharge groundwater and surface water to offset withdrawals. Replenish supplies. Discharges meet quality and quantity requirements of historic high value aquatic species. Project may include recycling.</p>	<p>(21) <u>Positive impact.</u> Replenishes quantity and quality of water supplies to undeveloped, native ecosystem state. Discharges meet historic predevelopment seasonal cycles of quality and quantity including temperature.</p>

REDUCE POTABLE WATER CONSUMPTION

INTENT: *Reduce consumption and encourage use of grey, recycled, and stormwater.*

METRIC: *Percentage of use water reduction.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p>(2) 25% reduction. Reduce potable water consumption by 25%. Reductions estimated over industry norms.</p>	<p>(9) 50% reduction. Reduce potable water consumption by 50%. Reductions estimated over industry norms.</p>	<p>(13) 75% reduction. Reduce potable water consumption by 75%. Reductions estimated over industry norms.</p>	<p>(17) 100% reduction. Eliminate potable water consumption use.</p>	<p>(21) <u>Water purification.</u> Project eliminates water consumption and recycles water which can be used by the local community.</p>

MONITOR WATER SYSTEMS

INTENT: *Monitor water system performance and receiving waters during operations.*

METRIC: *Document monitoring system in design.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p>(1) <u>One time monitoring.</u> Specify initial commissioning. No long term monitoring included.</p>	<p>(3) <u>Operations monitoring.</u> Conduct initial commissioning. Provide equipment or software to allow for detailed performance monitoring.</p>	<p>(6) <u>Long-term monitoring.</u> Conduct initial commissioning. Conduct long term water quality monitoring and reporting of water quality. Submit data to the <i>International Stormwater BMP Database.</i></p>	<p>(11) <u>Responsive monitoring.</u> Integrate impact monitoring and operational monitoring to alter operations to reduce adverse impacts to water quality and quantity.</p>	

PROTECT WETLANDS AND SURFACE WATER

INTENT: *Protect wetlands and surface water bodies by providing natural buffers, vegetation and soil protection zones.*

METRIC: *Size of natural buffer zone established around all wetlands and waters.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p><u>(1) Buffer > 50 feet.</u> Avoid development within buffer around wetlands, shorelines, or water bodies. Establish vegetation and soil protection zone in same area. Prohibit construction, vegetation removal, grading, filing, excavation, or dredging in buffer.</p>	<p><u>(4) Buffer > 100 feet.</u> Establish 100 ft or more buffer or as defined in applicable regulations (whichever is more stringent).</p>	<p><u>(9) Buffer > 200 feet.</u> Establish 200 ft or more buffer or as defined in applicable regulations (whichever is more stringent).</p>	<p><u>(14) Buffer > 300 feet.</u> Establish 300 ft or more buffer or as defined in applicable regulations (whichever is more stringent).</p>	<p><u>(18) Aquatic and wetland restoration.</u> Establish 300 ft buffer and restore previously degraded areas within buffer zone to natural state.</p>

PRESERVE FLOODPLAIN FUNCTIONS

INTENT: *Limit development and its impacts to maintain water management capacities and capabilities.*

METRIC: *Efforts to avoid floodplains or maintain predevelopment floodplain functions.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p>(2) <u>Avoid or mitigate impacts.</u> Avoid or limit development in floodplain, unless “water dependent infrastructure” must cross or be adjacent to a waterway. Maintain pre-development floodplain storage and do not increase flood elevation.</p>	<p>(5) <u>Maintain infiltration and water quality.</u> Limit or eliminate impervious surfaces. Maintain vegetation and soil protection zones. Do not decrease capacity of riparian area to support vegetation. Consider beneficial use of stormwater runoff.</p>	<p>(8) <u>Enhance riparian and aquatic habitat.</u> Prepare flood emergency plan for infrastructure. Maintain or enhance riparian and instream habitat.</p>	<p>(14) <u>Enhance connectivity and sediment transport.</u> Modify or remove structures frequently damaged by floods. Design project to avoid trapping sediment. Design for fish passage.</p>	

MANAGE STORMWATER

INTENT: *Minimize the impact of infrastructure on stormwater runoff quantity and quality.*

METRIC: *Infiltration and evapotranspiration capacity of the site and return to pre-development capacities. (Use TR-55)*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
	<p>(4) <u>Increased storage capacity.</u> Employ low impact development to reduce post development runoff volumes. Achieve onsite water storage (reduce runoff) by 30%, 20%, or 100% for greyfield, brownfield, or greenfield sites.</p>	<p>(9) <u>Extended storage capacity.</u> Employ low impact development to reduce post development runoff volumes. Achieve onsite water storage (reduce runoff) by 60%, 40%, or 100% for greyfield, brownfield, or greenfield sites.</p>	<p>(17) <u>Sustainable stormwater management.</u> Employ low impact development to match post development runoff to pre-development conditions. Achieve onsite water storage (reduce runoff) by 90%, 60%, or 100% for greyfield, brownfield, or greenfield sites.</p>	<p>(21) <u>Enhanced stormwater management.</u> Employ low impact development to match post development runoff to meet or exceed runoff from site in its undisturbed <i>climax ecosystem</i> conditions. Systems capture and repurpose more than 100% of stormwater onsite.</p>

PREVENT SURFACE AND GROUNDWATER CONTAMINATION

INTENT: *Preserve water resources using measures to prevent contamination.*

METRIC: *Designs, plans, and programs used to prevent and monitor water contamination.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p>(1) <u>Design for response.</u> Use spill and leak division systems, spill prevention plans, and clean up procedures.</p>	<p>(4) <u>Long term monitoring.</u> Include monitoring and reporting facilities. Conduct long term water quality monitoring and reporting of water quality. Submit data to the <i>International Stormwater BMP Database</i>.</p>	<p>(9) <u>Design for prevention.</u> Locate pollution sources away from sensitive environments. Design interceptors and facilities to catch spills and leaks.</p>	<p>(14) <u>Design for source elimination.</u> Eliminate pollution sources from operations. Recycle substances. Locate pollution sources away from sensitive environments.</p>	<p>(18) <u>Remediate existing contamination.</u> Clean up existing contamination and restore surface water and groundwater quality.</p>

MAINTAIN SURFACE WATER AND WETLAND FUNCTION

INTENT: *Maintain and restore ecosystem functions of stream, wetlands, water bodies and their riparian areas.*

METRIC: *Number of functions maintained and restored.*

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
<p><u>(3) Enhance one ecosystem function.</u></p> <p>CHOICES:</p> <p>Hydrologic connections.</p> <p>Water quality.</p> <p>Habitat.</p> <p>Sediment transport.</p>	<p><u>(6) Enhance two ecosystem functions.</u></p>	<p><u>(9) Enhance three ecosystem functions.</u></p>	<p><u>(15) Enhance four ecosystem functions.</u></p>	<p><u>(19) Restore ecosystem function.</u></p>

PROJECT VERIFICATION PROCESS

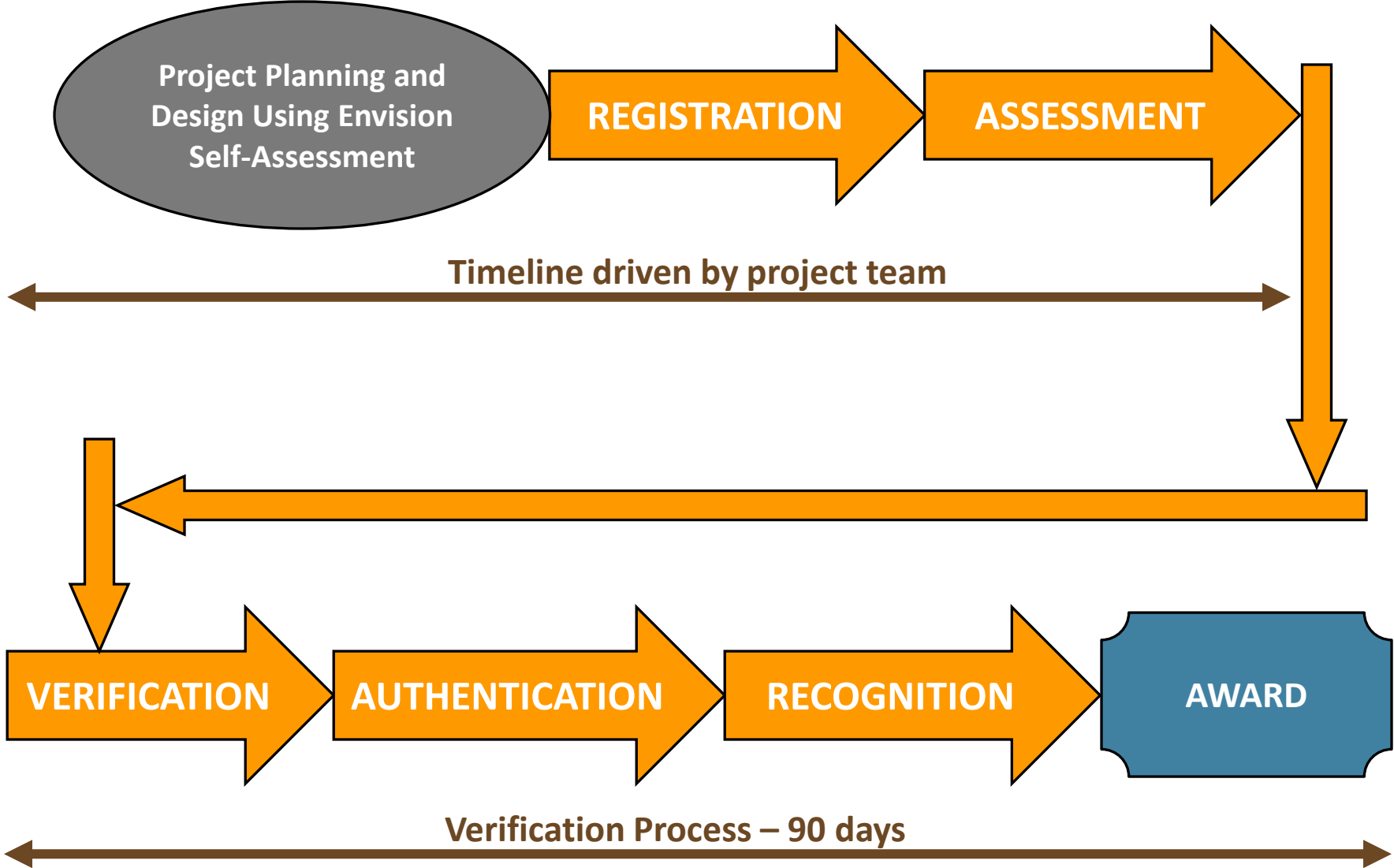
FEE SCHEDULE

- **Project registration fee: \$1,000 per project**
- **Verification Fees:**

Project Size (\$)	Non-Member Price	Member Price
< \$2 million	\$3,000	\$2,400
\$2 - 5 million	\$8,500	\$7,000
\$5 – 25 million	\$17,000	\$14,000
\$25 -100 million	\$25,000	\$21,000
\$100 – 250 million	\$33,000	\$28,000
> \$250 million	Contact ISI	Contact ISI

- **Appeal Fees: \$500 per credit**

PROJECT DESIGN AND VERIFICATION



VERIFICATION AND AWARD LEVELS

- Independent review provides confidence to stakeholders and rate payers
- Projects eligible for ISI awards
- Online process

<u>Award Level</u>	<u>Credits</u>
• Bronze:	20%
• Silver:	30%
• Gold:	40%
• Platinum:	50%

ENVISION BY THE NUMBERS

ENVISION BY THE NUMBERS

- Year incorporated: 2010
- Year Envision released: 2012
- Projects with awards: 3
 - *William Jack Hernandez Sports Fish Hatchery, Anchorage, AK (Gold)*
 - *Snow Creek Stream Environment Zone Restoration, Placer County, CA (Platinum)*
 - *South Los Angeles Wetland Park Los Angeles, CA (Platinum)*



<http://www.hdrinc.com/sites/all/files/content/projects/images/4248-william-jack-hernandez-sport-fish-hatchery-3795.jpg>



http://cdmsmith.com/en-US/Solutions/Water/-/media/Images/Solutions/Water/674x315/CDM_Smith_SnowCreekRestoration_674x315.ashx



<http://southcentralbungalow.files.wordpress.com/2009/06/southlosangeleswetlandspark1.jpeg>

ENVISION BY THE NUMBERS

- **Project in the award pipeline:** ~25
- **Projects using Envision:** ~150
- **Number of ENV SPs:** 1,600
- **Number of ENV SP Verifiers:** 45

SUMMARY

- Who is ISI?
- Why a New Rating System?
- Envision Rating System Overview
- Water and Stormwater Aspects of Envision
- Project Verification Process
- Envision by the Numbers

QUESTIONS?

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