Envision® Sustainable Infrastructure Rating System

First-Ever Envision® Project Award

The 141,000-square-foot William Jack Hernandez Sport Fish Hatchery is the heart of Alaska's sport fish stocking program and the largest indoor sport fish hatchery in North America.

- Includes more than 100 fish rearing tanks
- Raises Chinook and Coho salmon, rainbow trout, Arctic char, and Arctic grayling
- Produces more than six million fish per year
- Stocks 200 different locations
- State-of-the-art water recirculation technologies use approximately five percent of the water and energy required in a conventional hatchery

HDR was the prime consultant for this state-of-the-art hatchery.

For more information visit www.hdrinc.com.

PURPOSE OF ENVISION®

To foster a dramatic and necessary improvement in the performance and resiliency of our physical infrastructure across the full dimensions of sustainability. Envision® provides the framework and incentives needed to initiate this systemic change. As a planning and design guidance tool, Envision® is meant to provide industry-wide sustainability metrics for all infrastructure types—an approach similar to its vertical facility counterpart, LEED®.

ENVISION® BACKGROUND

Institute for Sustainable Infrastructure

Envision® was created by a strategic alliance of the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure (ISI). ISI is a not-for-profit education and research organization, dedicated to developing and maintaining a civil infrastructure rating system, and was formed by the American Council of Engineering Companies, the American Public Works Association and the American Society of Civil Engineers.

OVERVIEW

- Designed as a **project assessment tool** and to offer guidance for sustainable infrastructure design
- Can be used as a **decision-making checklist** or to document processes, decisions and design to apply for a third-party verified Envision® award
- Objective **framework of criteria** and performance achievement that helps identify ways in which sustainable approaches can be used to plan, design, construct and operate infrastructure projects

WHERE DOES ENVISION® APPLY?

- Roads, bridges, pipelines, railways, airports, dams, levees, landfills, water treatment systems and other civil infrastructure
- Does not include buildings or facilities, except process-focused, industrial-type facilities
- Used by infrastructure owners, design teams, community groups, environmental organizations, constructors, regulators and policy makers

STRUCTURE

Credit Categories & Subcategories

The Envision® rating system has 60 sustainability criteria—called credits—divided into five categories, each with two to three subcategories:

1 | Quality of Life – Purpose, Wellbeing, Community

2 | Leadership – Collaboration, Management, Planning

3 | Resource Allocation – Materials, Energy, Water

4 | Natural World – Siting, Land & Water, Biodiversity

5 | Climate and Risk – Emissions, Resilience

Credit Levels of Achievement

1 | Improved – Performance that is above conventional

2 | Enhanced – Sustainable performance that adheres to Envision® principles

3 | Superior – Sustainable performance that is noteworthy

4 | Conserving – Performance that has achieved essentially zero impact

5 | Restorative – Performance that restores natural or social systems

Innovation Points

Possible points awarded in each category for both exceptional performance and application of methods that push innovation in sustainable infrastructure.

Project Award Levels

To qualify for an award, projects must achieve a minimum percentage of the total applicable Envision® points. Projects can be recognized at four award levels.

Recognition Level	Total Applicable Points (%)
Bronze Award	20
Silver Award	30
Gold Award	40
Platinum Award	50

Envision® Gold Award: William Jack Hernandez Sport Fish Hatchery

CREDIT CATEGORY	AVAILABLE POINTS	AWARDED POINTS	INNOVATION POINTS	TOTAL POINTS	% OF AVAILABLE POINTS
QUALITY OF LIFE	181	67	0	67	37%
LEADERSHIP	121	81	1	82	67%
RESOURCE ALLOCATION	182	56	0	56	31%
NATURAL WORLD	164	84	0	84	51%
CLIMATE & RISK	122	35	0	35	29%
TOTAL PROJECT POINTS	**770**	**323**	**1**	**324**	**42%**

CREDIT CATEGORY	SUBCATEGORY	CREDITS AWARDED		POINTS AWARDED	LEVEL OF ACHIEVEMENT
QUALITY OF LIFE	PURPOSE	QL 1.1	Improve community quality of life	20	Conserving
		QL 1.2	Stimulate sustainable growth and development	5	Superior
		QL 1.3	Develop local skills and capabilities	1	Improved
	WELLBEING	QL 2.1	Enhance public health and safety	2	Improved
		QL 2.3	Minimize light pollution	2	Enhanced
		QL 2.4	Improve community mobility and access	7	Superior
		QL 2.5	Encourage alternative modes of transportation	3	Enhanced
		QL 2.6	Improve site accessibility, safety and wayfinding	12	Conserving
	COMMUNITY	QL 3.1	Preserve historic and cultural resources	1	Improved
		QL 3.2	Preserve views and local character	3	Enhanced
		QL 3.3	Enhance public space	11	Conserving
			QUALITY OF LIFE TOTAL	67	
LEADERSHIP	COLLABORATION	LD 1.1	Provide effective leadership and commitment	17	Conserving*
		LD 1.3	Foster collaboration and teamwork	15	Conserving*
		LD 1.4	Provide for stakeholder involvement	5	Enhanced
	MANAGEMENT	LD 2.1	Pursue by-product synergy opportunities	15	Restorative*
		LD 2.2	Improve infrastructure integration	16	Restorative*
	PLANNING	LD 3.1	Plan for long-term monitoring and maintenance	10	Conserving*
		LD 3.3	Extend useful life	3	Enhanced
	Innovation Credit	LD 0.0	Intent to share sample documentation for training	1	Earned 1 point
			LEADERSHIP TOTAL	82	
RESOURCE ALLOCATION	MATERIALS	RA 1.6	Reduce excavated materials taken off site	2	Improved
	ENERGY	RA 2.1	Reduce energy consumption	18	Conserving*
		RA 2.3	Commission and monitor energy systems	3	Enhanced
	WATER	RA 3.1	Protect fresh water availability	17	Conserving
		RA 3.2	Reduce potable water consumption	13	Superior
		RA 3.3	Monitor water systems	3	Enhanced
			RESOURCE ALLOCATION TOTAL	56	
NATURAL WORLD	SITING	NW 1.4	Avoid adverse geology	3	Superior
		NW 1.5	Preserve floodplain functions	5	Enhanced
		NW 1.7	Preserve greenfields	23	Restorative*
	LAND & WATER	NW 2.2	Reduce pesticide and fertilizer impacts	5	Superior
		NW 2.3	Prevent surface and groundwater contamination	18	Restorative*
	BIODIVERSITY	NW 3.1	Preserve species biodiversity	2	Improved
		NW 3.2	Control invasive species	5	Superior
		NW 3.3	Restore disturbed soils	8	Conserving
		NW 3.4	Maintain wetland and surface water functions	15	Conserving
			NATURAL WORLD TOTAL	84	
CLIMATE & RISK	EMISSIONS	CR 1.2	Reduce air pollutant emissions	2	Improved
	RESILIENCE	CR 2.2	Avoid traps and vulnerabilities	16	Conserving
		CR 2.4	Prepare for short-terms hazards	17	Conserving
			CLIMATE & RISK TOTAL	35	
				TOTAL POINTS AWARDED	**324**

** Credits awarded the highest level*

CREDIT LEVELS OF ACHIEVEMENT

- **Improved:** Performance that is above conventional
- **Enhanced:** Sustainable performance that is on the right track
- **Superior:** Sustainable performance that is noteworthy
- **Conserving:** Performance that has achieved essentially zero impact
- **Restorative:** Performance that restores natural or social systems