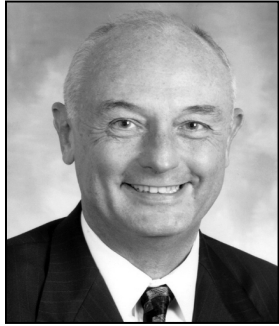


ENVISION™



Smart Growth, Smart Infrastructure

Panel Introduction



Bill Bertera
Executive Director, ISI

- Career as professional executive director
 - Water Environment Federation
 - Rebuild America Coalition
 - APWA
- Executive positions at ICMA and NA Counties
- BS in Business Management and MPA

Panel Introductions



Jennifer Rivers, ENV SP, LEED AP
Technical Director, ISI

- ❑ Charged with continued development of Envision
- ❑ Broad engineering experience in PM, sustainable design, environmental security and outreach
- ❑ Army veteran – Germany, Kuwait and Iraq
- ❑ BS, Mining Eng., MS, International Affairs and MS, Natural Resources and Sustainable Development

Panel Introductions



Michaella Wittmann, LEED Fellow, ENV SP
Director of Sustainability, HDR

- ❑ 20 years' experience with integrating sustainable solutions across project types
- ❑ Initiated HDR's sustainability program
- ❑ Broad experience over a wide range of client types
- ❑ Led the first project certified by ISI
- ❑ BS, Electrical Engineering

Infrastructure – Fundamental to Smart Growth

- ❑ Smart Growth demands Smart Infrastructure
- ❑ It can drive and supports Smart Growth for community development
- ❑ Infrastructure helps deliver environmental, social and economic resilience
- ❑ It must be high performance and sustainable
- ❑ But...Infrastructure is in a state of disrepair

ASCE's Report Card

- ❑ 15 categories rated
- ❑ Overall grade of D
- ❑ \$2.2 trillion = five year investment needed
- ❑ Ranked 23rd worldwide



America's Infrastructure Today



The Infrastructure for Tomorrow



Do Envision and Smart Growth Align?

- ❑ Envision's five categories were matched against with the six Livability Principles
- ❑ There was uniform congruence between the categories
- ❑ The fundamental Envision principle: "Are you doing the right project"?
- ❑ A positive Envision rating means the project supports Smart Growth

How Do We Know if It is Sustainable?

- ❑ There is no agreement on how to rate infrastructure
 - 900 rating systems are available worldwide
 - Current US rating systems are sector-specific
 - No US system covers all infrastructure systems
- ❑ Enter Envision™ - designed to fill the gap



What do we mean by “Sustainable”?

“...to meet the needs of the present without compromising the ability of future generations to meet their own needs.”

World Commission on Environment and Development, 1987

What is Envision?

- ❑ Envision is a tool, which itself is part of a system, to help evaluate the sustainability of civil infrastructure
- ❑ The system includes:
 - A self assessment checklist
 - The Envision rating tool
 - A credential program for individuals
 - A project evaluation and verification program
 - A recognition program for sustainable infrastructure

Who Developed Envision?



Envision™ was developed in joint collaboration between the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure.



The Institute for Sustainable Infrastructure is a not-for-profit education and research organization founded by the American Public Works Association, the American Council of Engineering Companies and the American Society of Civil Engineers.



What Makes Envision Unique?

- ❑ Speaks to the triple bottom line - social, economic and environmental goals
- ❑ Applies to all civil infrastructure
- ❑ Includes design, planning, construction and maintenance elements
- ❑ Applies at any point in an infrastructure project's life cycle
- ❑ Designed to keep pace with the changing concept of sustainability

What types of Infrastructure are Rated?

INFRASTRUCTURE CATEGORIES



ENERGY



- geothermal
- hydroelectric
- nuclear
- coal
- natural gas
- oil/refinery
- wind
- solar
- biomass
- other



WATER



- potable water distribution
- capture and storage
- water reuse
- stormwater management
- flood control
- other



WASTE



- solid waste
- recycling
- hazardous waste
- collection and transfer
- other



TRANSPORTATION



- airports
- roads/highways
- bike/pedestrians
- railways
- public transit
- ports
- waterways
- other



LANDSCAPE



- public realm
- parks
- ecosystem services
- other



INFORMATION



- telecommunications
- internet /phones
- satellites
- data centers
- sensors
- other

Who is the Audience for Envision?

Public and Private Sector Infrastructure
Developers and Owners

Why Will Developers and Owners Want to Use Envision?

Because it will improve their
performance...and

public confidence in their performance

How Will it Help Them?

- ❑ By causing them to think about sustainability in an organized fashion that is consistent with their community values and priorities
- ❑ Envision is not prescriptive...it helps decide outcomes, not strategies
- ❑ It is a powerful planning tool for whole systems and, simultaneously, an individual project evaluator

AND...

- ❑ It includes metrics to help identify and measure the value of an investment in sustainable infrastructure over the life of the project
- ❑ It allows decision-makers to make decisions about that value at the point of procurement...where it matters...and
- ❑ It aligns with Smart Growth

Envision and Smart Growth Alignment



1 PURPOSE

- 4 QL1.1 Improve Community Quality of Life
- 3 QL1.2 Stimulate Sustainable Growth & Development
- 3 QL1.3 Develop Local Skills & Capabilities

2 WELLBEING

- 1 QL2.1 Enhance Public Health & Safety
- 6 QL2.2 Minimize Noise and Vibration
- 6 QL2.3 Minimize Light Pollution
- 1 QL2.4 Improve Community Mobility & Access
- 1 QL2.5 Encourage Alternative Modes of Transportation
- 6 QL2.6 Improve Accessibility, Safety, & Wayfinding

3 COMMUNITY

- 6 QL3.1 Preserve Historic & Cultural Resources
- 6 QL3.2 Preserve Views & Local Character
- 6 QL3.3 Enhance Public Space

QL0.0 Innovate or Exceed Credit Requirements

1 COLLABORATION

- 4 LD1.1 Provide Effective Leadership & Commitment
- 4 LD1.2 Establish A Sustainability Management System
- LD1.3 Foster Collaboration & Teamwork
- 4 LD1.4 Provide for Stakeholder Involvement

2 MANAGEMENT

- LD2.1 Pursue By-Product Synergy Opportunities
- 5 LD2.2 Improve Infrastructure Integration

3 PLANNING

- 5 LD3.1 Plan For Long-Term Monitoring & Maintenance
- 5 LD3.2 Address Conflicting Regulations & Policies
- 5 LD3.3 Extend Useful Life

LD0.0 Innovate or Exceed Credit Requirements

1 MATERIALS

- RA1.1 Reduce Net Embodied Energy
- 3 RA1.2 Support Sustainable Procurement Practices
- 3 RA1.3 Use Recycled Materials
- 6 RA1.4 Use Regional Materials
- RA1.5 Divert Waste From Landfills
- 5 RA1.6 Reduce Excavated Materials Taken Off Site
- RA1.7 Provide For Deconstruction & Recycling

2 ENERGY

- 2 RA2.1 Reduce Energy Consumption
- 2 RA2.2 Use Renewable Energy
- RA2.3 Commission & Monitor Energy Systems

3 WATER

- 6 RA3.1 Protect Fresh Water Availability
- 2 RA3.2 Reduce Potable Water Consumption
- RA3.3 Monitor Water Systems

RA0.0 Innovate or Exceed Credit Requirements

1 SITING

- 6 NW1.1 Preserve Prime Habitat
- 6 NW1.2 Protect Wetlands & Surface Water
- 6 NW1.3 Preserve Prime Farmland
- 6 NW1.4 Avoid Adverse Geology
- 6 NW1.5 Preserve Floodplain Functions
- 6 NW1.6 Avoid Unsuitable Development on Steep Slopes
- 4 NW1.7 Preserve Greenfields

2 LAND+WATER

- 4 NW2.1 Manage Stormwater
- NW2.2 Reduce Pesticide & Fertilizer Impacts
- 4 NW2.3 Prevent Surface & Groundwater Contamination

3 BIODIVERSITY

- 6 NW3.1 Preserve Species Biodiversity
- NW3.2 Control Invasive Species
- NW3.3 Restore Disturbed Soils
- 6 NW3.4 Maintain Wetland & Surface Water Functions

NW0.0 Innovate or Exceed Credit Requirements

1 EMISSIONS

- 1 CR1.1 Reduce Greenhouse Gas Emissions
- 1 CR1.2 Reduce Air Pollutant Emissions

2 RESILIENCE

- 6 CR2.1 Assess Climate Threat
- 5 CR2.2 Avoid Traps & Vulnerabilities
- 3 CR2.3 Prepare For Long-Term Adaptability
- 5 CR2.4 Prepare For Short-Term Hazards
- 6 CR2.5 Manage Heat Island Effects

CR0.0 Innovate or Exceed Credit Requirements

1 – Transportation Options 2 – Affordable Housing 3 – Economic Competitiveness 4 – Support Existing Communities 5 – Leverage Investments 6 – Value Communities & N'hoods



Applications Using Envision

- ❑ Over 150 Projects that we know about
 - Water and wastewater treat plants
 - Pipelines
 - Brownfield restorations
 - Airport upgrades
 - Highway interchanges
 - Light rail facilities
 - Wetlands development

Agencies Using Envision

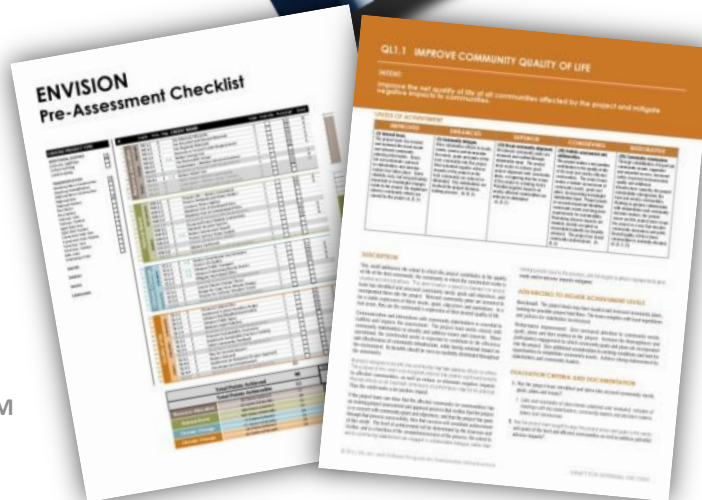
- City of Dallas
- Port of Long Beach
- City of Chicago
- New York City DEP
- County of Los Angeles
- San Diego Airport
- Cape Cod Planning Authority
- California Water Resources Department

The **ENVISION™** Rating System

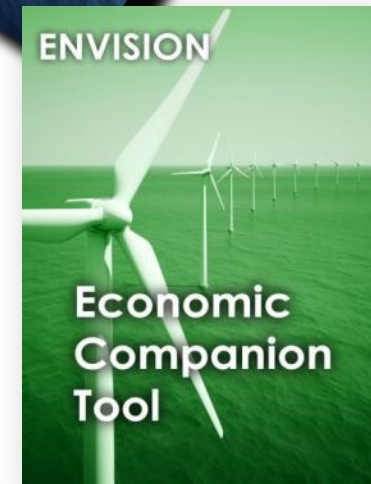


Envision Components

Phase Toolkits



Verification
And Recognition



Companion
Tool

Envision™
Checklist



Envision Credits



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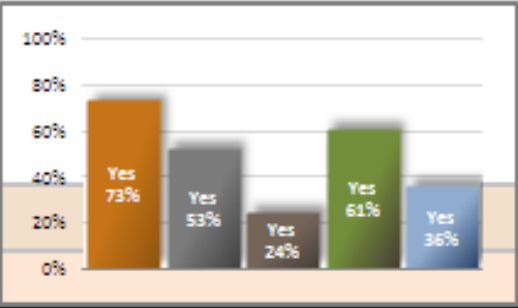
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- CR2.5 Manage Heat Island Effects
- CR0.0 Innovate or Exceed Credit Requirement

Envision Checklist

- Available for no cost on ISI website
- Contains Yes/No questions
- Used for project self-assessment
 - Introduce concepts of sustainability to infrastructure projects
 - Initial assessment before using Envision rating system, or
 - Rapidly compare project alternatives

Envision Checklist



Quality of Life

1. Purpose

QL 1.1 Improve Community Quality of Life

Intent: Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

Metric: Measures taken to assess community needs and improve quality of life while minimizing negative impacts.

Assessment Questions:	Yes	No	N/A	
Are the relevant community needs, goals and issues being addressed in the project?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	?
Are the potentially negative impacts of the project on the host and nearby communities been reduced or eliminated?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	?
Has the project design received broad community endorsement, including community leaders and stakeholder groups?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	?
Total		2	of	3

Envision Rating System

- ❑ Available for no cost on ISI website
- ❑ More in-depth assessment of sustainability aspects of project
 - 60 credits - Evaluation criteria describe 5 levels of achievement
 - Quantitative and qualitative questions
 - Recognizes innovation
- ❑ For self-assessment or Verification

Envision Guidance Manual

QL1.1 IMPROVE COMMUNITY QUALITY OF LIFE

INTENT:

Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

LEVELS OF ACHIEVEMENT

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
(2) Internal focus. The project team has located and reviewed the most recent and relevant community planning information. Some, but not systematic outreach to stakeholders and decision makers has taken place. Some relatively easy, but not particularly important or meaningful changes made to the project. No significant adverse community effects are caused by the project. (A, B, C)	(5) Community linkages. More substantive efforts to locate, review, assess and incorporate the needs, goals and plans of the host community into the project. Most potential negative adverse impacts of the project on the host community are reduced or eliminated. Key stakeholders are involved in the project decision-making process. (A, B, C)	(10) Broad community alignment. All relevant community plans are reviewed and verified through stakeholder input. The project team works to achieve good project alignment with community plans, recognizing that the scope of the project is a limiting factor. Potential negative impacts on nearby affected communities are reduced or eliminated. (A, B, C)	(20) Holistic assessment and collaboration. The project makes a net positive contribution to the quality of life of the host and nearby affected communities. The project team makes a holistic assessment of community needs, goals and plans, recognizing meaningful stakeholder input. Project meets or exceeds important identified community needs and long-term requirements for sustainability. Remaining adverse impacts are minimal, mostly accepted as reasonable tradeoffs for benefits achieved. The project has broad community endorsement. (A, B, C)	(25) Community revitalization. Through rehabilitation of important community assets, upgraded and extended access, increased safety, improved environmental quality and additional infrastructure capacity, the project substantially revitalizes the host and nearby communities. Working in genuine collaboration with stakeholders and community decision-makers, the project owner and the project team scope the project in a way that elevates community awareness and pride. Overall quality of life in these communities is markedly elevated. (A, B, C, D)

DESCRIPTION

This credit addresses the extent to which the project contributes to the quality of life of the host community; the community in which the constructed works is situated and directly affects. This determination is based on how well the project team has identified and assessed community needs, goals and objectives, and incorporated them into the project. Relevant community plans are assumed to be a viable expression of those needs, goals, objectives and aspirations. In a real sense, they are the community's expression of their desired quality of life.

Communication and interactions with community stakeholders is essential to reaffirm and improve the assessment. The project team works closely with community stakeholders to identify and address issues and concerns. When operational, the constructed works is expected to contribute to the efficiency and effectiveness of community infrastructure, while having minimal impact on the environment. Its benefits should be seen as equitably distributed throughout the community.

A project designed to benefit one community may have adverse effects on others. The purpose of this credit is to recognize projects that provide significant benefits to affected communities, as well as reduce or eliminate negative impacts. Positive effects on all important dimensions of performance may not be practical. Thus the credit seeks a net positive impact.

If the project team can show that the affected community (or communities) has an existing project assessment and approval process that verifies that the project is in concert with community goals and objectives, and that the project has gone through that process successfully, then that success will constitute achievement of this credit. The level of achievement will be determined by the Assessor and

Verifier, and is a function of the comprehensiveness of the process, the extent to which community stakeholders are engaged in collaborative dialogues (rather than merely outside input to the process), and the degree to which improvements were made and/or adverse impacts mitigated.

ADVANCING TO HIGHER ACHIEVEMENT LEVELS

Benchmark: The project team may have located and reviewed community plans, looking for possible project fatal flaws. The team complies with local regulations and policies for stakeholder involvement.

Performance improvement: Give increased attention to community needs, goals, plans and their relation to the project. Increase the thoroughness and participatory engagement by which community goals and plans are incorporated into the project. Give additional consideration to existing conditions and look for opportunities to rehabilitate community assets. Achieve strong endorsement by stakeholders and community leaders.

EVALUATION CRITERIA AND DOCUMENTATION

A. Has the project team identified and taken into account community needs, goals, plans and issues?

1. Lists and examples of documents obtained and reviewed, minutes of meetings with key stakeholders, community leaders and decision-makers, letters and memoranda.

- Intent
- Metric
- Levels of Achievement
- Description
- Advancing to higher achievement levels
- Evaluation criteria and documentation
- Sources

Envision – Online Scoring Sheet

Breezy Plains Windmill Project

Score: 104 Max Score: 181

I want to:

Jump to category: **QL** LD RA NW CR

View the Guidance Manual: [PDF](#) / [HTML](#)

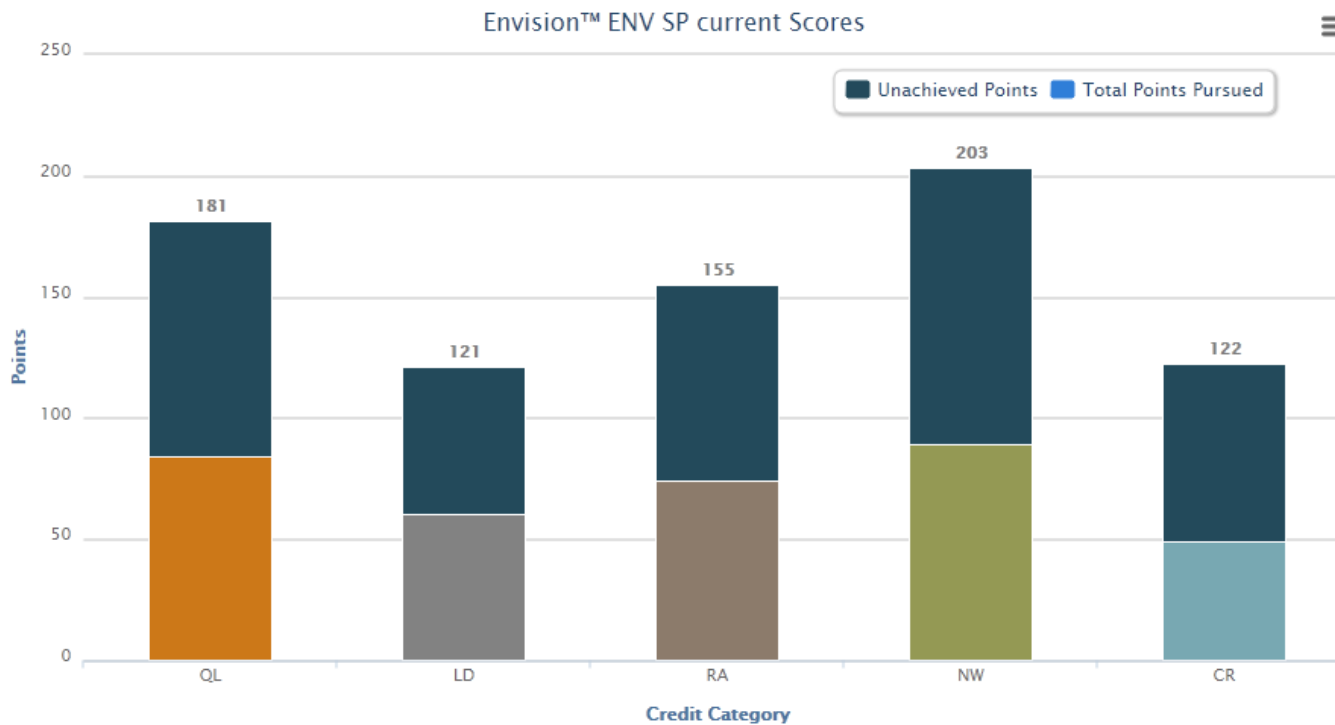
Do You Need Help?

Credit	Credit Intent and Metric	Is this Required for the Project?	Level Of Achievement	Score	Possible Points
QUALITY OF LIFE					
QL1.1	Improve community quality of life. Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities. details / guidance	Applicability <input type="text" value="Applicable"/>	Superior <input type="text" value="Superior"/>	10	25
Notes:					
QL1.2	Stimulate sustainable growth and development. Support and stimulate sustainable growth and development, including improvements in job growth, capacity building, productivity, business attractiveness and livability. details / guidance	Applicability <input type="text" value="Applicable"/>	Improved <input type="text" value="Improved"/>	1	16
Notes:					
QL1.3	Develop local skills and capabilities. Expand the knowledge, skills and capacity	Applicability <input type="text" value="Applicable"/>	Restorative <input type="text" value="Restorative"/>	15	15

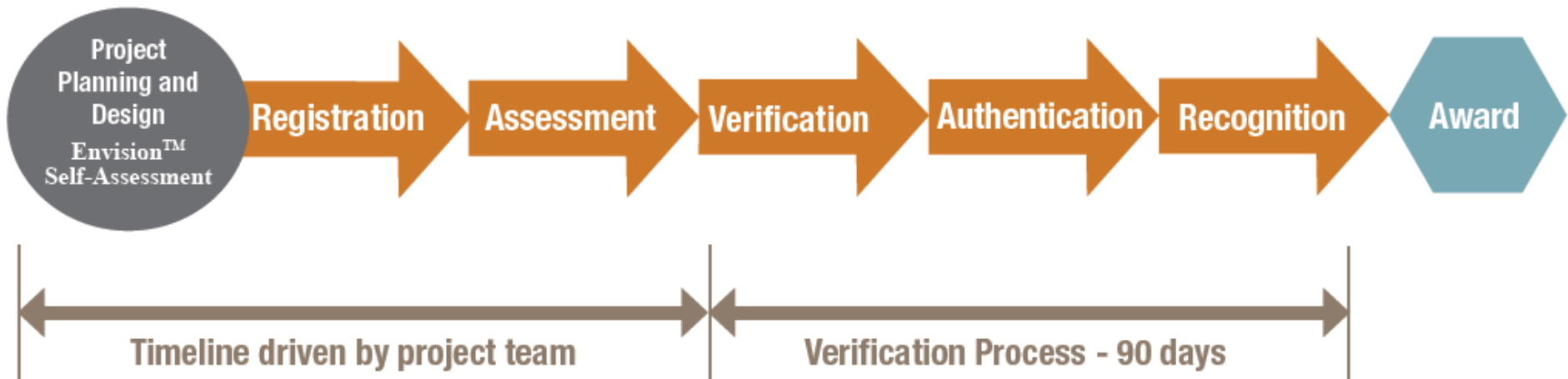


Envision – Online Scoring Sheet

Credit Category	Applicable Points	Earned Points	Innovation Points	Total Points Pursued	Percentage of Applicable Points
QUALITY OF LIFE	181	84	0	84	46%
LEADERSHIP	121	56	4	60	50%
RESOURCE ALLOCATION	155	74	0	74	48%
NATURAL WORLD	203	89	0	89	44%
CLIMATE AND RISK	122	49	0	49	40%
Total Project Points	782	352	4	356	46%



Verification



- ❑ An optional independent, 3rd party review
- ❑ Confirms the project meets Envision criteria
- ❑ Enables projects to become eligible for awards

Envision Awards



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

- Based on percentage of applicable points

Envision Credentialing

□ Envision Sustainability Professional (ENV SP)

- Training and exam available on ISI website
 - Webinars on ISI website
 - In-person workshops (available soon)
- Discounts for public sector, university faculty, ISI Members

□ Provisional credential for students

Other Envision Resources

❑ Economic Tools

- Some are publically available, others proprietary

❑ Academic Resources

- Lesson plans, slides, capstone project ideas, etc. to introduce Envision to university classrooms

❑ Speakers Bureau

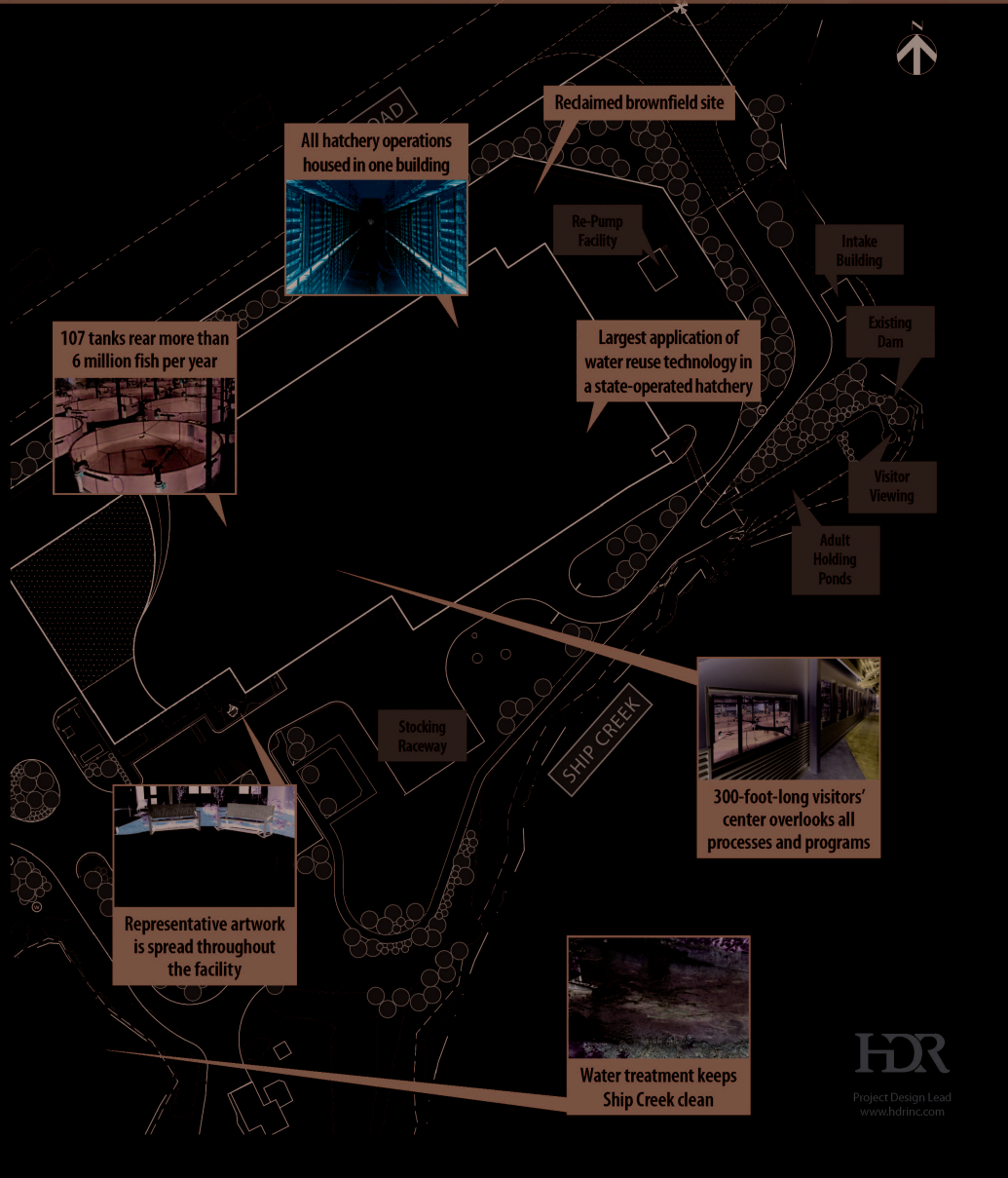
- Request ENV SP speakers

Certifying a Project

- » Envision certification accomplished after project completion
- » Sustainability was a project priority from the beginning



141,000 square-foot facility | **8-acre** site



Sustainability/Smart Growth

Improving community quality of life

- ❑ *Economic and Social Benefits:* Recreation, Jobs, Tax revenue, Income, Enhancing the environment
- ❑ *Improved visitor safety and experience:* Redesigned traffic flow and parking with crosswalks; Pathways around the building; ADA accessible viewing platforms and trails
- ❑ *Public education integral in design*

Sustainability/Smart Growth

Preserving greenfields

- ❑ Building on a reclaimed brownfield site benefits the environment and public by leaving the area cleaner than before development

Sustainability/Smart Growth

Reducing energy consumption significantly over traditional hatcheries:

- Recirculation technology greatly reduces heating and pumping costs;
- All hatchery operations within one building
- Tremendous opportunities for energy conservation and performance monitoring
- Maximizes control of energy and minimizes water use

Sustainability/Smart Growth

Protecting freshwater availability

- ❑ Storm and process water treatment prevents surface and ground water contamination
- ❑ Recirculation technology saves water and energy
- ❑ Drinking water supply protected - updated the regional groundwater model to document no negative impacts from hatchery
- ❑ Properly abandoning old, unneeded wells

William Jack Hernandez Sport Fish Hatchery Highlights



6 Million
fish raised each year

1st

Project Ever Awarded
an Envision™ Rating

107
tanks

35
mini hatcheries



55° Fahrenheit
Optimal temperatures for rearing cold water species capable of surviving in Alaska's cold waters

over **8.5 Miles**
of pipe, conduit and duct work

Annually, the fishing industry contributes

\$545 Million in income

\$1.4 Billion to Alaska's economy



54 Million
gallons per day are saved through water reuse during peak-use periods

LARGEST
hatchery of its kind in North America

Fish used to stock **200** different locations



95%
reduction in water use compared to conventional fish culture

5%
of energy use for water heating in major systems compared to single-pass fish culture

Awards



2013 - American Society of Civil Engineers World Headquarters (ASCE) Outstanding Civil Engineering Achievement (OCEA) Award, Private, National

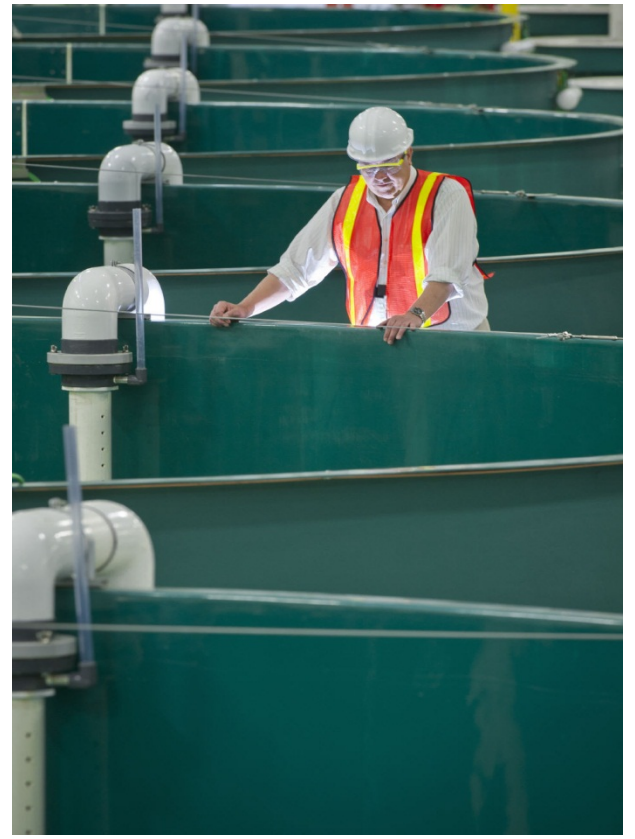


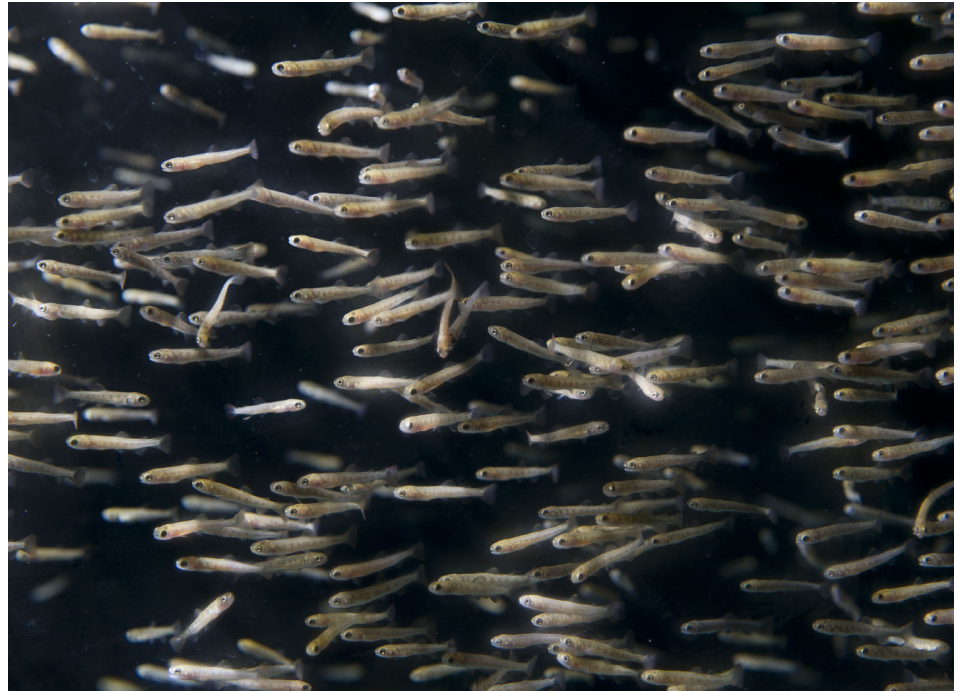
2012 - American Council of Engineering Companies (ACEC) Engineering Excellence Awards, National Recognition



2010 - Peg and Jules Boston Award for Economic Development and Environmental Stewardship









Envision™ Timeline — William Jack Hernandez Sport Fish Hatchery

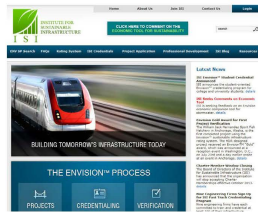
11-08-12

The **William Jack Hernandez Sport Fish Hatchery** identified as a possible Envision project following an HDR Water Sustainability Practice Group Webinar.

12-12-12

Official Project Registration on the ISI website.

💰 *Registration fee paid.*



03-04-13

Dan Billman and Meg O'Mullane begin creating credit narratives and selecting supporting project files to submit for documentation.

05-02-13

ISI Verifier notifies HDR of initial credit review – Silver level achieved.

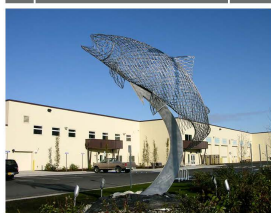
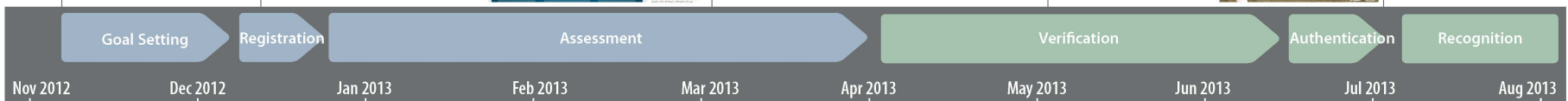
ISI Verifier: *Denise Nelson, Greeley and Hansen*



07-02-13

ISI Authenticator approves review results and notifies HDR of final Envision credit review – GOLD level awarded.

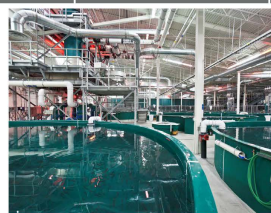
ISI Authenticator: *Jenn Rivers, ISI*



12-07-12

Seven HDR staff* participate on a five hour conference call to go credit by credit through the Envision rating system. Participants referred to the Envision 2.0 Guidance Manual and Envision Verifiers Manual to determine a preliminary level of achievement for each credit.

*Dan Billman, Mark Hassebrock, Mike McGowan, John Lazzara, Robert Phinney, Mona Eigbrett, and Michaela Wittmann.



04-05-13

HDR officially submits Hatchery credit documentation.

💰 *Verification fee paid.*



06-15-13

HDR submits follow-up Hatchery credit documentation.

No additional fee required.

06-21-13

ISI Verifier completes final documentation review.

07-23-13

Award celebration at the WJH Hatchery in Anchorage, AK.



07-24-13

Award celebration at ACEC Headquarters in Washington, DC.



HDR

HDR

ISI

Initial Review Using Envision Workbook and Guidance Manual (12-07-12)

<p>QL2.5</p>	<p>Encourage alternative modes of transportation. Improve accessibility to non-motorized transportation and public transit. Promote alternative transportation and reduce congestion.</p>	<p>INCLUDE</p>	<p>Enhanced (3 / 15)</p>	
<p>QL2.6</p>	<p>Improve site accessibility, safety and wayfinding. Improve user accessibility, safety, and wayfinding of the site and surrounding areas.</p>	<p>INCLUDE</p>	<p>Restorative (15 / 15)</p>	
<p>QL3.1</p>	<p>Preserve historic and cultural resources. Preserve or restore significant historical and cultural sites and related resources to preserve and enhance community cultural resources.</p>	<p>INCLUDE</p>	<p>Improved (1 / 16)</p>	
<p>QL3.2</p>	<p>Preserve views and local character. Design the project in a way that maintains the local character of the community and does not have negative impacts on community views.</p>	<p>INCLUDE</p>	<p>Restorative (14 / 14)</p>	

Envision Project Registration (12-12-12)

Projects

Project Registration

Please provide the following information in order to register the project.

Please have your project levels of achievement and documentation ready before you register for Verification. After you register, you may begin uploading project scores and data.

ISI will contact the applicant within 10 business days after you complete registration.

Project Name:

Location, including country:

Project Point of Contact:

Project Contact Name:

Project Contact Email:

Project Contact Phone:

ENV SP Contact:

ENV SP Name:

ENV SP Email:

ENV SP Phone:

Names of Companies involved in the project:

Brief description of the project:
(Please type or paste a 1000 word or shorter description of the project.)

Alaska's new William Jack Hernandez (WJH) Sport Fish Hatchery is a one-of-a-kind facility for the production of salmon and trout. The project marks the largest ever application of intensive recirculation technology by a public agency, employing treatment and reuse techniques to dramatically reduce water and energy consumption, saving public dollars on an ongoing basis. Capable of rearing six million salmon and trout annually, the new 141,000-square-foot, \$89.5 million hatchery is owned and operated by the Alaska Department of Fish and Game, Division of Sport Fish (DSF). Built on a reclaimed brownfield site, the hatchery uses innovative engineering features that are sustainable and cost-effective. A water reuse program saves up to 95 percent of the water compared to conventional hatcheries while placing less demand on Anchorage's

Total constructed project cost:

Start Date of Project: (MM/YYYY)

Estimated date this project will be sent to ISI for Verification: (MM/YYYY)

Estimated date of project completion: (MM/YYYY)

[Create Project and Pay Application Fee](#)




Next Steps by ISI

- ❑ ISI assigned a Project Verifier who contacted HDR within one week
- ❑ ISI and HDR finalized contract details for the project verification

ISI Project Verifier:
Denise Nelson
PE, LEED AP, ENV SP
Greeley and Hansen

Initial Envision Documentation (4-05-13)

	ENVISION™ Sustainable Infrastructure Rating System
Credit Documentation Cover Sheet	
CREDIT TITLE	PROJECT
<small>Please fill in the title of the credit being pursued.</small>	Project Name: WJH Sport Fish Hatchery
NW 1.2 - Protect wetlands and surface water.	ENV PV Name: Mona Eigbrett
LEVEL OF ACHIEVEMENT	
<small>Please indicate the level of achievement being pursued for verification.</small>	
<input type="radio"/> None <input checked="" type="radio"/> Improved <input type="radio"/> Enhanced <input type="radio"/> Superior <input type="radio"/> Conserving <input type="radio"/> Restorative	
CREDIT SUMMARY	
<small>Please use the space below to summarize how the project meets the level of achievement being pursued</small>	
<p>The project site includes an effluent settling basin from the previous development and operations of the old Elmendorf Hatchery. This settling basin has been claimed under the jurisdictional determination of the US Army Corps of Engineers. This wetland is a result of process water being discharged into the settling basin, so is part of the previously developed site. There was no work done in the wetland as part of the project, and so there was no impact to the wetland. This is documented in the EA on pages 3-7 and 4-7. Page 4-7 also discusses dredging of the pond which was not done as part of the project: Hatchery_EA_FINAL The project did no construction in the pond and maintained its use as a effluent settling basin for the new hatchery.</p>	

Initial Verifier Rating (5-02-13)

- ❑ *The Verifier noted:* The summary score below is based on the documentation provided (Achieved Now column). We identified several credits that were lacking documentation that we suspect the Assessor (HDR) has available. If the Assessor provides additional documentation, we anticipate the project will achieve a Gold Award.

Category	Total Applicable	Achieved Now	Can be Achieved
QL	181	66	75
LD	121	65	83
RA	182	25	55
NW	164	69	88
CR	122	21	21
Total	770	246	322
Percentage		32%	42%
Award		Silver	Gold

Initial Verifier Rating

Example of Verifier Agreeing with Credit Level

QL2.6	<p>Improve site accessibility, safety and wayfinding. Improve user accessibility, safety, and wayfinding of the site and surrounding areas. details / guidance</p>	<p>Applicability Applicable ▾</p>	<p>Conserving ▾</p>	12	15	<ul style="list-style-type: none"> • QL 2.6 Final Submittal.pdf x
		<p>Notes: The uploaded file includes a credit cover sheet with narrative, including a complete list of supporting documentation, followed by all referenced documentation in the order listed.</p>				
		<p>ENV SP STAGE 1</p> <p>Entered score: Conserving (12 / 15)</p> <p>Your notes: <i>"The uploaded file includes a credit cover sheet with narrative, including a complete list of supporting documentation, followed by all referenced documentation in the order listed."</i></p>				
		<p>VERIFIER FEEDBACK</p> <p>Verifier DOES agree with your assessment of this question.</p> <p>Verifier agrees with this score: Conserving (12 / 15)</p> <p>Verifier notes: <i>"Agreed. Conserving. The documentation suggests the project is well integrated into the community."</i></p>				

Initial Verifier Rating

Example of Verifier Disagreeing with Credit

LD1.3	Foster collaboration and teamwork. Eliminate conflicting design elements, and optimize system by using integrated design and delivery methodologies and collaborative processes. details / guidance	Applicability Applicable ▼	No Added Value ▼	0	15	Upload File for this Credit
Notes: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>						
<p>ENV SP STAGE 1</p> <p>Entered score: Restorative (15 / 15)</p> <p>Your notes: <i>"The uploaded file includes a credit cover sheet with extensive narrative, including a complete list of supporting documentation, followed by all referenced documentation in the order listed."</i></p>						
<p>VERIFIER FEEDBACK</p> <p>Verifier DOES NOT agree with your assessment of this question.</p> <p>Verifier suggested score: Conserving (8 / 15)</p> <p>Verifier notes: <i>"Disagreed. Superior. To achieve Conserving, provide clear evidence of risk/reward sharing (CM/GC)."</i></p>						

Envision Documentation Responses (6-15-13)

- ❑ The table below lists the 12 Envision credits that were resubmitted.
- ❑ All revised text and supporting documentation were highlighted for easy reference .

Credit Name	Level of achievement requested	Total points	No. of new supporting documents
QL 1.3 Develop local skills and capabilities	Improved	1	1
LD 1.3 Foster Collaboration and Teamwork	Conserving	15	1
LD 2.2 Improve infrastructure integration	Restorative	16	1
LD 3.1 Plan for long-term monitoring and maintenance	Conserving	10	1
LD 0.0 Innovate or Exceed Credit Requirements	Requesting 2 of 6 points	2	1 new narrative
RA 2.1 Reduce energy consumption	Conserving	18	5
RA 3.2 Reduce potable water consumption	Superior	13	3
NW 1.3 Preserve Prime Farmland	Exclude	--	1
NW 1.4 Avoid Adverse Geology	Superior	3	2
NW 1.5 Preserve Floodplain	Enhanced	5	2
NW 1.7 Preserve Greenfields	Restorative	23	2
CR 2.2 Avoid Traps and Vulnerabilities	Conserving	16	4

Quality of Life Category

Sample Credit Narrative

QL 1.3 Develop Local Skills and Capabilities

Improved

- ❑ In this project ADOT&PF, ADF&G, HDR and Kiewit worked as a team in developing the project and requirements.
- ❑ The General contract for the CMGC required a local hiring preference per AK state regulation. See section 7.13 'Preferential Employment' of the CMGC contract.
- ❑ A Kiewit Superintendent (and CMGC team member) required that a percentage of local craft personnel be trained for entry level positions. Records of local training are kept by KBG.

Leadership Category

Sample Credit Narrative

LD1.4 Provide for Stakeholder Involvement Enhanced

- Bureau of Land Management
- Elmendorf Air Force Base
- United States Fish and Wildlife Services
- United States Air Force
- Alaska Department of Transportation and Public Facilities
- Alaska Department of Fish and Game
- Members of the public who sport fish
- The Attorney General's office
- Anchorage Water and Wastewater Utility
- Municipality of Anchorage Planning Department
- Municipality of Anchorage Flood Department
- United States Environmental Protection Agency
- Alaska Department of Environment and Conservation (ADEC) Division of Spill Prevention and Response
- Alaska Department of Environment and Conservation (ADEC) Division of Water, Wastewater Discharge Program
- National Oceanic and Atmospheric Administration (NOAA)
- United States Army Corps of Engineers
- Alaska Division of Natural Resources (ADNR), Division of Mining, Land and Water
- ADNR, office of Habitat Management and Permitting
- ADNR, Office of Project Management and Permitting
- ADNR, Division of Coastal Ocean and Management
- American Institute of Architects

Resource Allocation Category

Sample Credit Narrative

RA1.6 Reduce Excavated Materials Taken Offsite

Superior

- ❑ Usable excavation was used on site as much as possible. To prepare the brownfield site for the new hatchery building, the old cooling pond berm on the existing site was removed (Sheet C-103). The berm consisted of 22,624 CY of excavation (Quantities shown in pages 9-12, of the 100% Phase 2a and 2b cost estimate). 22,713 CY sub excavation was removed from the designated footprint (page 11 of cost estimate).
- ❑ 11,375CY of this usable excavation was used in landscaping berms around the northeast corner of the new building (Sheet C-103 shows location, and quantities are shown on pages 9-12 of 100% Phase 2a and 2b cost estimate). 7,154 CY of usable excavation was also used under structural fill in paved areas 'A' and 'B' around the hatchery building (Areas shown in C-802, and quantities calculated in 'backfill worksheet').

Natural World Category Sample Credit Narrative

NW 1.3 Preserve Prime Farmland

Not Applicable

Per the USDA's Natural Resources Conservation Service (NRCS) web site: "There are no prime farmlands in Alaska since our soil temperatures do not meet the threshold established by Congress."

The team also discussed this with the USDA.

Climate & Risk Category

Sample Credit Narrative

CR 1.2 Reduce Air Pollutant Emissions

Improved

- ❑ Planning for the WJH Hatchery included air quality analyses. The results stated that the hatchery would have negligible impact on area air quality. Attached are the sections from the EA and the calculations.
- ❑ EA sections on air quality and calculations:
[EA FINAL Air Quality](#)

Innovation Credit (1 pt.)

Leadership Category

LD 0.0 Innovation
1 Point Earned

Setting a Precedent that is Transferable to Other Projects

- HDR Hatchery project staff will work with the Hatchery Project Verifier and ISI's Technical Director to identify several key credits that will be published for the benefit and education of other ISI Project Verifiers.
- HDR proposes two credits listed below as possible examples; we also welcome credit suggestions from the Project Verifier, Denise Nelson, and the ISI Technical Director, Jenn Rivers.

QL 1.1 Improve Community Quality of Life

RA 3.1 Protect Freshwater Availability



WJH Sport Fish Hatchery

Quality of Life Credits Earned

Subcategory	Credits Awarded		Points Awarded	Level of Achievement
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 <u>wayfinding</u>	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	



WJH Sport Fish Hatchery Leadership Credits Earned

Subcategory	Credits Awarded		Points Awarded	Level of Achievement
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
<i>Innovation Credit</i>	LD 0.0	Intent to share sample documentation for training	1	Earned 1 point
LEADERSHIP TOTAL			82	



WJH Sport Fish Hatchery

Resource Allocation Credits Earned

Subcategory	Credits Awarded		Points Awarded	Level of Achievement
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	



WJH Sport Fish Hatchery Natural World Credits Earned

Subcategory	Credits Awarded		Points Awarded	Level of Achievement
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	

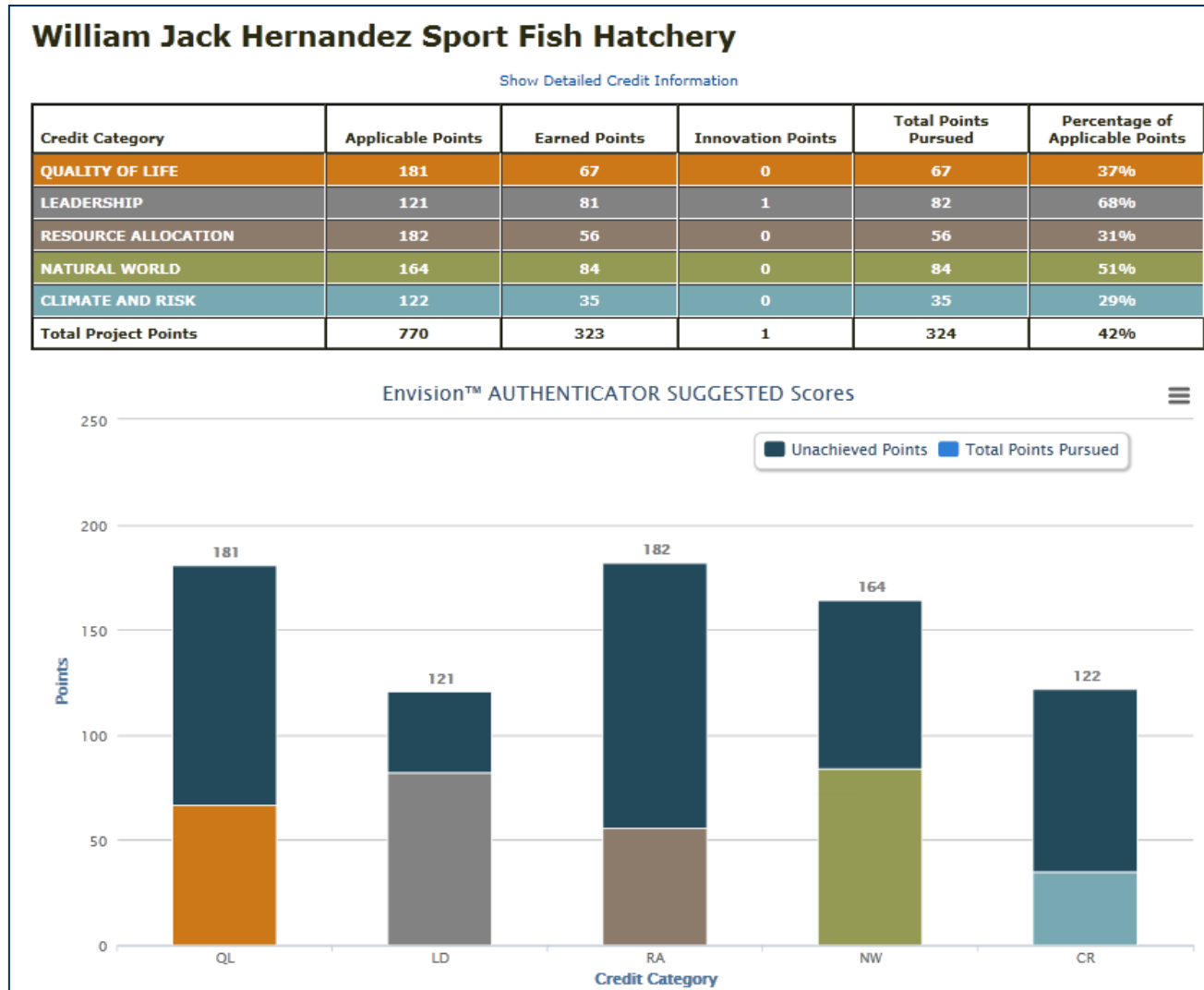


WJH Sport Fish Hatchery Climate and Risk Credits Earned

Subcategory	Credits Awarded		Points Awarded	Level of Achievement
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	

Final Verifier/Authenticator Decision

Gold Level Award: Received 7-02-13



ISI/HDR - First Envision Certified Project



The Project Video



Envision/Smart Growth Summary

- ❑ Envision mirrors and supports Smart Growth
- ❑ Results are measured and verified:
 - Quality of Life increases involvement and sustainable growth supported
 - Leadership means integrated collaborative planning
 - Materials are recycled and energy is reduced
 - Greenfields and are protected and urban locations emphasized
 - Emissions are lowered and resilience is increased



Q&A

ENVISION™



Smart Growth, Smart Infrastructure

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