

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com





Colorado Springs Utilities
It's how we're all connected.

Selling residential water efficiency: The MLS Green Features Addendum

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Sr. Conservation Specialist

Wed Oct 4th 3:55-4:25- Sonoma B

Goals

- **Share**: Changes in Real Estate which monetize & communicate:
 - Water efficiency
 - management
 - sustainability
- **Tools**: to implement these changes where you live

Investments

- **ROI**: In the practice of water efficiency, part of discussion is *Return on Investment*.
- **Simple Payback** : how long the direct investment takes to pay for itself. Toilet-1year.
->Operating costs go down.
- **Property Marketability**: Can these projects raise the value of & differentiate my home?

Old School Home Buying System:



- *Realtor-lead*
- *Driving around*
- *Knowledge-control*
- *Listing Limitations*
- *Experience*
- *Luck!*

It can feel like this....



Past-Homes



Home Buying Attributes:

- Price
- Location
- Style
- Bedrooms
- Bathrooms
- Cabinets
- Carpet
- Carports
- Condition

New motivations...



Water outlook & drought

As your local water provider, we have a responsibility to protect your water supply and help ensure the health, safety and economic vitality of our community. We carefully monitor several factors, including levels of our reservoirs, snowpack and forecasted stream flow.

As of June 30, 2017

Current situation

- In June, the average temperature was above average and precipitation was well below average.
- We currently have 3.4 years of demand in storage.
- Conditions expected to remain hot across Colorado this summer, with equal chances of above or below average precipitation.
- Above average yield expected, runoff is nearly complete.
- We are monitoring streamflow, demand and storage to maximize.
- Currently, the Water Shortage Ordinance is set at Stage 1 Vol continue to use water wisely.

See the full report

[Residential](#) [Business](#) [Work With Us](#)



[CUSTOMER SERVICE](#) [WAYS TO SAVE](#) [ENVIRONMENT](#) [SAFETY](#) [COMMUNITY](#)

Related links

- [Water restrictions](#)
- [Water saving tips inside the home](#)
- [Water saving tips outside the home](#)
- [Irrigation rebates](#)

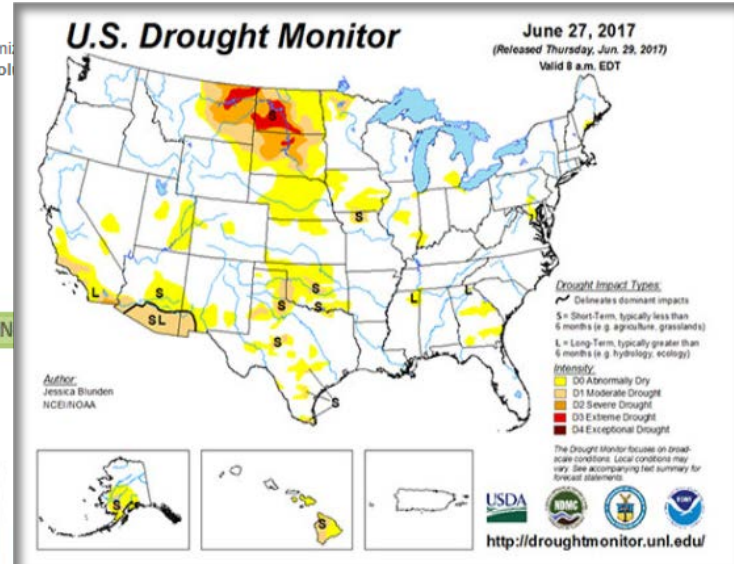
My Account

User ID

Password

Login

[Forgot User ID](#)
[Forgot Password](#)
[Register Residential Account](#)
[Register Business Account](#)



Drought persists

As your local water provider, we have a responsibility to protect and carefully manage your water supply. Currently, we are actively planning for what is shaping up to be a serious drought year for Colorado Springs.



Colorado Springs is located in a semi-arid climate where drought conditions regularly occur. The U.S. Drought Monitor shows Colorado in moderate to exceptional drought conditions, which are forecasted to continue through at least 2013. Because our city isn't located on a major waterway, water is delivered to Colorado Springs from nearly 200 miles away.

Recent lower-than-normal snow pack, lack of significant precipitation and increased demand has strained Colorado Springs' water supply. System-wide storage is at a near historical low of 48 percent; normal storage is 65 percent.



Water Restrictions, Landscape restrictions.

New water values...



Colorado Springs Utilities

It's how we're all connected.



- Scarcity
- Quality of life
- Stewards
- Environment
- Changes in landscape perception
- Maintenance, cost, impact
- Technology & Solutions
- Result-modifying homes to address concerns....
- **Return on investment for Sustainability**

New Solutions



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New and existing homes



Utility Efficiency Rebates

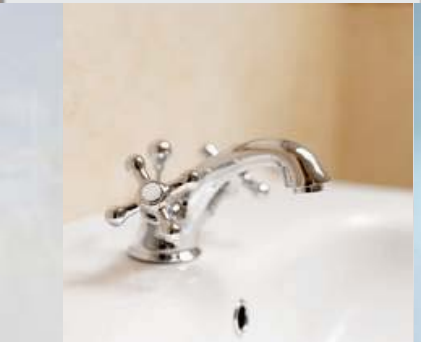
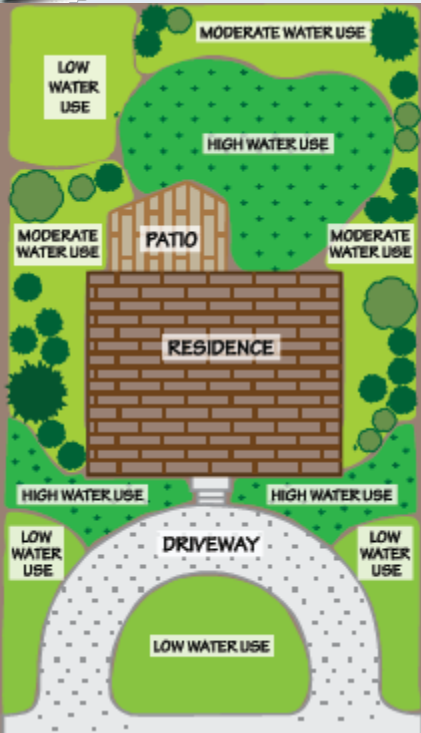
- Fixtures
- Landscapes
- Systems



NAHB NATIONAL
GREEN BUILDING
PROGRAM™



Present-Homes



- Attributes:
- *All of the above &*
- *Efficiency*
- *Conservation*
- *Safe & Healthy*
- *Affordable*
- *Sustainable*
- *“Green”*



Present-Process Democratized

realtor.com®

trulia

Homes.com®


Zillow



Home Buying:

- Online Research
- Buy Remote
- Direct buy
- Remodelers
- Flippers
- FSBO
- More details...
- Realtor controlled



the Green MLS | TOOL KIT

Value for Green Homes



Documentation is key:

- ✓ Green building certificate
- ✓ Performance test results
- ✓ Local green disclosure form
- ✓ 12 month utility usage

Some involved entities



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High-Performance Homebuilding

- NAR's Green REsource Council
- Home Innovation Research Labs, National Association of Home Builders
- IBACOS
- EPA—ENERGY STAR Certified New Homes, Indoor airPLUS, WaterSense, Indoor Environments Division
- DOE—Building America Program
- RESNET
- Passive House Institute US

Existing Home Remodeling/Upgrades

- Air Conditioning Contractors of America
- DOE—Home Performance with ENERGY STAR
- Elevate Energy
- Buildings Performance Institute
- National Home Performance Council
- Masco Home Services
- Vermont Green Homes Alliance

Other Programs

- Ingersoll Rand Residential Solutions
- HUD/EPA—Partnership for Sustainable Communities

- Walk Score[®]
- DOE EERE—Lawrence Berkeley and Sandia National Solar Labs

Real Estate Agents/MLSs

- Real Estate Standards Organization - Robert Gottesman, CEO; Rob Larson, Chair, Data Dictionary Working Group
- Ben Kaufman (Keller-Williams, Seattle-area)
- John Rosshirt (Stanberry & Associates REALTORS[®], Austin, TX)
- Northwest MLS (Seattle area)

- IRES—NET (northern Colorado)
- Traverse Area Association of REALTORS[®]
- LPS MLS Solutions

Appraisers

- Sandy Adomatis, Adomatis Appraisal Service
- Appraisal Institute

Consultants

- Social, Environmental & Economic Consulting, LLC
- Conservation Services Group (MLS Energy Project)

Standards organizations

- **Identify national standards for each major Green MLS category as a reference for enumeration definitions:**
 - **Energy Efficiency** – References: EPA and DOE reference materials (ENERGY STAR, EERE Fact Sheets, Energy.gov, etc.)
 - **Energy Generation** – Reference: [Sandia Labs PV Value Tool™](#)
 - **Indoor Air Quality** – References: EPA Indoor AirPLUS specifications, [National Center for Healthy Housing's National Healthy Housing Standard](#)
 - **Location** – [Enterprise Green Communities' 2011 Enterprise Green Communities Criteria](#)
 - **Sustainability** – USGBC LEED for Homes (Materials specifications), Home Innovation Research Labs National Green Building Standard™ (Resource Efficiency specifications)
 - **Water Conservation** – EPA WaterSense specifications, [EPA Green Infrastructure webpage](#), [City of Lancaster Green Infrastructure Plan Appendix](#)

The Guide

Requires collaborative approach

Phases

Realtors

Builders

Appraiser

Underwriters

Trades

Utilities

Green MLS Implementation Guide

v1.0

Brought to you by the
National Association of REALTORS®
and NAR's Green REsource Council

- Green MLS fields are offered in three tiers:
 1. Third-party verified fields-*Certification*
 2. Marketing/Green search fields (general, non-verified)-*Retrofits*
 3. Technical fields (green features embedded into existing fields)-*Details*

Up to your regional MLS body to implement.

At-A-Glance: Green Search/Marketing Fields

- **GreenWaterConservation**
- Water-Smart Landscaping
- Green Infrastructure
- Water Recycling
- Efficient Hot Water Distribution
- Low-Flow Fixtures (It says WaterSense later)

At-A-Glance: Specific/Technical Fields

- **STRUCTURE FIELDS**
- Interior Features
 - WaterSense labeled bathroom faucet(s)
 - WaterSense labeled toilet(s)
 - Dual-flush toilet(s)
 - WaterSense labeled urinal(s)!-future?
 - WaterSense labeled showerhead(s)
- Other stuff....

At-A-Glance: Specific/Technical Fields

- **LotFeatures (outdoor)**

- WaterSense labeled irrigation controller
- Used WaterSense irrigation partner
- South/West Shading
- North Windbreaks
- Water-Smart Landscaping
- Native Plants
- Permeable Paving
- Vegetated Swale
- Certified Wildlife Landscape
- Gray Water System

- *All can be described in detail.*

Documentation matters Professional Designations help.

- Implementation & MLS-different everywhere!
- Realtors populate Marketing Fields
 - NAR Green Designation helps:
 - Green materials
 - Energy-efficient technology
 - Green ratings
 - Green design
 - Green incentives
 - Green living
 - And more



“Sixty-one percent of builders said that customers will pay more for a green home.”

Source: New and Remodeled Green Homes. McGraw-Hill




Appraiser Capability



Colorado Springs Utilities



- Valuation of Sustainable Buildings: Residential –
- A professional development program designation

 <p>AI Reports® Form 820.05*</p>	Client File #:	Appraisal File #:
	<h2>Residential Green and Energy Efficient Addendum</h2>	
	Client:	
	Subject Property:	
City:	State:	Zip:
<p>Additional resources to aid in the valuation of green properties and the completion of this form can be found at http://www.appraisalinstitute.org/education/green_energy_addendum.aspx</p>		
<p>The appraiser hereby certifies that the information provided within this addendum:</p> <ul style="list-style-type: none"> • has been considered in the appraiser's development of the appraisal of the subject property only for the client and intended user(s) identified in the appraisal report and only for the intended use stated in the report. • is not provided by the appraiser for any other purpose and should not be relied upon by parties other than those identified by the appraiser as the client or intended user(s) in the report. • is the result of the appraiser's routine inspection of and inquiries about the subject property's green and energy efficient features. Extraordinary assumption: Data provided herein is assumed to be accurate and if found to be in error could alter the appraiser's opinions or conclusions. • is not made as a representation or as a warranty as to the efficiency, quality, function, operation, or cost savings of the reported items or of the subject property in general, and this addendum should not be used for such assessments. <p>Green Building: The practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's lifecycle from siting to design, construction, operation, maintenance, renovation, and demolition. This practice expands and complements the classic building design concerns of economy, utility, durability, and safety (US EPA). High Performance building and green building are often used interchangeably.</p> <p>Six Elements of Green Building: A green building has attributes that fall into the six elements of green building known as (1) site, (2) water, (3) energy, (4) materials, (5) indoor environmental quality, and (6) maintenance and operation. The first five elements are the most measurable elements of green or high performance housing. Appraisers should develop an income approach to support energy efficient contributory value.</p>		
<p>THIRD-PARTY VERIFICATIONS (See types defined in glossary).</p> <p>The following verified items are considered within the appraisal analysis of the subject property:</p>		
<p>Green Certification</p> <p>Certifications attest that the home meets certain minimum thresholds.</p>	Environmental Protection Agency (EPA):	<input type="checkbox"/> Indoor airPLUS <input type="checkbox"/> WaterSense <input type="checkbox"/> ENERGY STAR
	Energy Department (DOE):	<input type="checkbox"/> Zero Energy Ready Home (ZERH)
	Home Innovation Research Labs NGBS Home Remodel:	
	Home Innovation Research Labs NGBS New Home:	<input type="checkbox"/> Bronze <input type="checkbox"/> Silver <input type="checkbox"/> Gold <input type="checkbox"/> Emerald
	Living Building Challenge (LBC):	<input type="checkbox"/> Living Building Certified <input type="checkbox"/> Petal Certification
	Passivhaus Standard:	<input type="checkbox"/> PHI Low Energy <input type="checkbox"/> EnerPhit <input type="checkbox"/> Passive House
Passive House Institute US:	<input type="checkbox"/> PHIUS+ 2015	
USGBC LEED:	<input type="checkbox"/> Certified <input type="checkbox"/> Silver <input type="checkbox"/> Gold <input type="checkbox"/> Platinum	
Other:		
Date Verified: ___/___/___	Green Certification Version: _____	<p>ABOVE VALID ONLY IF CHECKED:</p> <input type="checkbox"/> Verification reviewed on site <input type="checkbox"/> Verification attached to this report
	Organization URL: _____	

Appraiser Capability



- Valuation of Sustainable Buildings: Residential –
- A professional development program designation

EFFICIENCY FEATURES (Water, Energy, and Environmental). See types defined in glossary).

The following items are considered within the appraisal analysis of the subject property:

Insulation	<input type="checkbox"/> Fiberglass Blown-In <input type="checkbox"/> Foam Insulation <input type="checkbox"/> Cellulose <input type="checkbox"/> Fiberglass Batt Insulation <input type="checkbox"/> R-Value _____ Wall _____ Ceiling <input type="checkbox"/> Other (Describe): _____		
Building Envelope	Envelope Tightness: _____ Unit: <input type="checkbox"/> CFM25 <input type="checkbox"/> CFM50 <input type="checkbox"/> ACH50 <input type="checkbox"/> ACH natural Instructions: Insert the rating as a number that could be 0.5 to 7ACH50 or higher. The lower the number, the more air tight the envelope. Building Codes for area show maximum Envelope Tightness allowed based on the climate zone. Not all areas have adopted a building code. http://bcap-energy.org/		
Windows	<input type="checkbox"/> ENERGY STAR® <input type="checkbox"/> Low E <input type="checkbox"/> High Impact <input type="checkbox"/> Storm	<input type="checkbox"/> Double Pane <input type="checkbox"/> Tinted <input type="checkbox"/> Solar Shades <input type="checkbox"/> Triple Pane	
Day Lighting	<input type="checkbox"/> # Of Skylights: _____ <input type="checkbox"/> # Of Solar Tubes: _____	<input type="checkbox"/> Other (Describe): _____ (% Of lighting LEDs): _____	
	ENERGY STAR®: <input type="checkbox"/> Dishwasher <input type="checkbox"/> Refrigerator <input type="checkbox"/> Washer/Dryer <input type="checkbox"/> Other: _____ Energy Source: <input type="checkbox"/> Propane <input type="checkbox"/> Electric <input type="checkbox"/> Natural Gas <input type="checkbox"/> Other: _____ Note: ENERGY STAR® appliances do not result in an ENERGY STAR® Home.		
	<input type="checkbox"/> ENERGY STAR® Size: _____ gallons <input type="checkbox"/> Solar (next page) <input type="checkbox"/> Heat Pump <input type="checkbox"/> Coil <input type="checkbox"/> Tankless		
	<input type="checkbox"/> High Efficiency HVAC SEER: _____ Efficiency Rating: _____% AFUE* _____% *Annual Fuel-Utilization Efficiency	<input type="checkbox"/> Heat Pump Efficiency Rating: _____ COP: _____ HSPF: _____ SEER: _____ EER: _____	Thermostat/Controllers? <input type="checkbox"/> Yes <input type="checkbox"/> No Programmable Thermostat? <input type="checkbox"/> Yes <input type="checkbox"/> No Auxiliary heat source? <input type="checkbox"/> Yes <input type="checkbox"/> No Radiant Floor Heat? <input type="checkbox"/> Yes <input type="checkbox"/> No Geothermal? <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Vehicle Ready? (car charger) <input type="checkbox"/> Yes <input type="checkbox"/> No
Environmental Quality	<input type="checkbox"/> Energy (ERV) or Heat Recovery Ventilator (HRV) <input type="checkbox"/> Other Measured Whole-House Ventilation Device (See glossary) <input type="checkbox"/> Humidity Monitoring Device installed		<input type="checkbox"/> Non Toxic Pest Control <input type="checkbox"/> Radon System: <input type="checkbox"/> Active <input type="checkbox"/> Passive
Water Efficiency	<input type="checkbox"/> Reclaimed Water System (Describe): _____ <input type="checkbox"/> Greywater reuse system <input type="checkbox"/> Water Saving Fixtures	<input type="checkbox"/> Rain Barrels Used in Irrigation Cistern size: _____ gallons Location of cistern: _____	
Utility Costs	Annual Utility Cost: \$ _____/year, based on: ____/____/____ to ____/____/____ (full year). Includes (check all that apply): <input type="checkbox"/> Electric <input type="checkbox"/> Heating <input type="checkbox"/> Water <input type="checkbox"/> Other: _____		# Of Occupants: _____
Comments	Include source for information provided in this section. If a property is built green but not formally certified, it still deserves proper description and analysis to value the features. The market analysis is of the structure's physical, economic, and locational attributes and not an analysis of its label alone. Provide additional information that illustrates how this property exceeds local building code. This document is intended for new construction or existing homes that have been retrofit to include higher energy or green features.		

Completed by: _____ Title: _____ Date: _____

Owner/Seller

Populate Green Features Addendum- No Realtor liability

-Easy

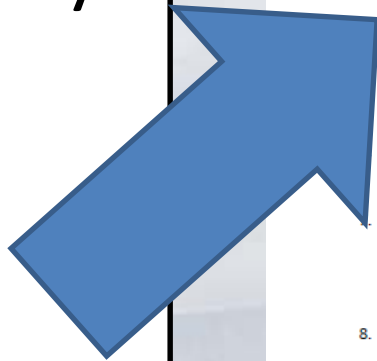
-Improves

Valuation

-

Standard/vetted

-Source



ENERGY / GREEN FEATURES ADDENDUM

Instructions: This checklist is designed to be completed by the Seller or the Builder. Check all items that apply. Anything left blank does not apply or is unknown. Additional documentation such as receipts or information from manufacturers is also helpful, whenever available. Broker may deliver a copy of this Addendum to prospective buyers.

Property Address		
City	State	Zip Code
Completed By: <input type="checkbox"/> Builder <input type="checkbox"/> Seller	Name(s)	Date

- Home Performance Programs *Home Performance with ENERGY STAR
- Construction Type:
 - SIPS ICF Material Efficient Framing
 - Improved Insulation Straw Bale Earthen Built / Rammed Earth
 - Other
- Heating, Cooling and Ventilation: (check box for each type)
 - Ground Source Heat Pump High Efficiency Furnace / Boiler (eg. > = 90% AFUE)
 - *Tankless / On Demand Water Heater Whole House Fan Ceiling Fans
 - Evaporative Cooling High Efficiency Water Heater (eg. > = 90%, or EF > = .82 for gas)
 - *High SEER A/C SEER Rating _____ Insulation Air Sealing Upgrades Completed
 - *Home Orientation (South Facing Overhangs)
- Water Efficient Features:
 - Low Flow Toilets Low Flow Fixtures / Shower Heads
 - Low-water sod Hot Water Recirculation Pump / Structured Plumbing
 - *Xeriscaping *Greywater System
- Indoor Air Quality:
 - * Indoor Air Quality Plus by ENERGY STAR No or Low VOC Paint
 - *Heat Recovery Ventilator / Fresh Air System Radon Mitigation System
 - Green Guard Certified Carpet / Flooring (documentation required)
 - No Formaldehyde Certified Cabinetry (documentation required)
- Sustainable Materials:
 - FSC Certified Lumber FSC Certified Cabinets Recycled Content
 - Reclaimed Flooring Sustainable Flooring Regionally Harvested
- Energy Features:
 - *ENERGY STAR / Low E Windows (documentation required) Automated Lighting Controls
 - *Orientation / Passive Solar Design High Efficiency Lighting
 - ENERGY STAR Rated Roof (documentation required) *Programmable Thermostat
- ENERGY STAR Appliances
 - *Refrigerator *Range / Oven *Dishwasher Clothes Washer

*ADDITIONAL COMMENTS:

*Asterisks indicate fields that are the same on both the "Green Features Addendum" and the Appraisal Institute "Residential Green and Energy Efficient Addendum" forms.



Understanding the Residential Green and Energy Efficient Addendum

Greg Geilman June 14, 2017

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TARGET
PROFESSIONAL
PROGRAMS

**APPRAISERS
E&O INSURANCE**

- ▶ Discounts for multi-appraiser firms
- ▶ Prior Acts Coverage available
- ▶ Easy, online application

<https://www.appraisalbuzz.com/understanding-the-residential-green-and-energy-efficient-addendum/>

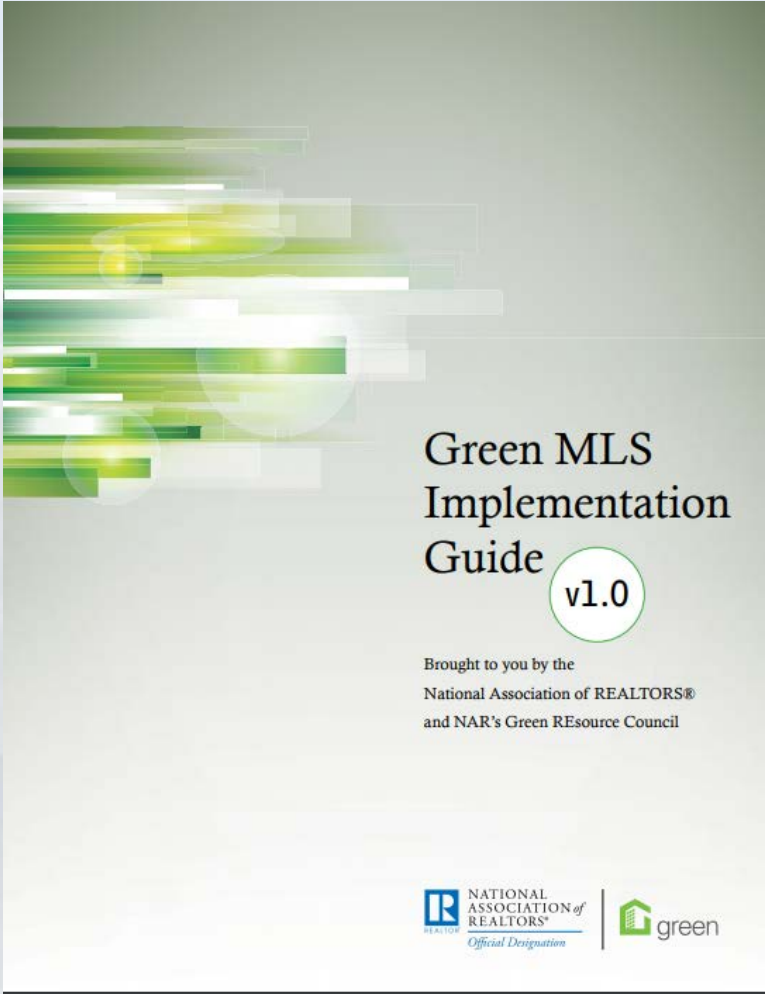
<http://www.resnet.us/blog/wp-content/uploads/formidable/Al-Residential-Green-and-Energy-Efficient-Addendum-Handouts-Compatibility-Mode.pdf>

Start here



the
Green MLS | TOOL KIT

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Green MLS Implementation Guide

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